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Research Article

Constraints in the Production and Marketing of Rose, Marigold and Chrysanthemum of Baghpat district (U.P.)

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ABSTRACT

India has 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 lifestyles and under increased urban affluence. The decrease the area, production and shrinkage in of flowers in Baghpat district in the last some years. Therefore, an attempt has been made in the present study to identify major constraints in the production and marketing of some cut & loose flowers i.e. Rose, Marigold and Chrysanthemum. To derive the inferences of the study, the primary data were collected from 60 farmers i.e. 20 each from Barnawa, Binauli, and Bijwara village of Binauli block of Baghpat district. Data collected for study pertaining to the period 2018-19. Primary data was collected from selected Rose, Marigold and Chrysanthemum growers through personal interview method with the help of pretested schedule. The main production constraints noticed were inadequate knowledge of recommended packages and practices, unfavorable weather condition and non-availability of quality water for irrigation. The main marketing constraints were price fluctuation, small quantity of marketable surplus, non-availability of reliable market information system and involvement of large number of intermediaries in the marketing.

Keywords: *Floriculture, Cut & loose flowers, Production and Marketing.*

INTRODUCTION

India has 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 lifestyles and under increased urban affluence. Marigold is an important and popular flower of India and ranks third in number after roses and chrysanthemum. The rose ranks first and chrysanthemum ranks second (Dutch flowers actuation). The commercial cultivation of seedling plot of marigold, Rose 'T- Budding' or 'Shield Budding' and chrysanthemum 'Terminal stem cutting' is a source of income and employment to marginal farmers as well as large farmers.

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Rose (*Rosa spp.*) flower cultivation is getting increasingly popular among farmers. Rose; belonging to family *Rosaceae,* Rose is one of the top selling flowers in the global flower trade and stands first among the commercial cut flowers. There is considerable demand for rose in the form of cut & loose flower, dry petals, long stemmed flower and its by-products such as Rose water, Gulkand, perfume, etc. in domestic as well as export market. The cut rose account for nearly 60 per cent of cut flower trade in global market nearly one lakh hectare of land is estimated to be under production in India. The leading flower is jasmine which is grown in 6270 hectares followed by rose (5564 ha). The major rose growing states are Maharastra, Karnataka, Tamilnadu, Rajasthan, Uttar Pradesh and West Bengal. As for asUttar Pradesh state is concerned 612 hectares of landis under rose cultivation, which is nearly 10 per cent of the total cropped area under rose crop in India.

Marigold (*Tagetes erecta, Tagetes patula*) flower cultivation is getting increasingly popular among farmers. Marigold, belonging to family *Asteraceae,* is an important ornamental herb grown for its highly decorative and long lasting flowers. Marigold is a very important flowering plant useful for cut flowers, garlands, garden disc play, loose flowers and perfume industries. Marigold is one such potential flower crops for natural colour extraction. Marigold is not only grown as ornamental cut flowers and landscape plant but also as a source of 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.

The Chrysanthemum (*Dendrantheama grandiflora*) is a belonging to family *Asteraceae*. It is also called 'Guladaudee' commonly. Chrysanthemum (*Chrysanthemum indicum*) is a very popular flower crop and commercial importance among others flowers because of the there are literally hundreds of types of chrysanthemums with variations in height, spread, colors, size of flower, bloom time, and type of bloom, which useful in garlands, garden display, cut flowers and perfume industries. Perfumes are used in manufacturing soaps, cosmetics, hair oils, foods and tobacco industries. Without flowers social cultural religious, functions/ gathering appears in complete grandeur. Chrysanthemums are grown in two ways for cut flowers, depending up on market demand.

The leading flower is jasmine which is grown in 6270 hectares followed by rose (5564 ha) and chrysanthemum (3870 ha). The major rose growing states are Maharastra, Karnataka, Tamilnadu, Rajasthan, Uttar Pradesh and West Bengal. Flowers grown in Rajasthan are exported to Japan, Holland, Singapore, U.A.E. Germany and Switzerland. In U.P. Meerut, 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.

Keeping in the view the above facts the study was conducted on Constraints in the Production and Marketing of Rose, Marigold and Chrysanthemum of Baghpat district (U.P.).

MATERIALS AND METHODS

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 villages (Barnawa, Binauli, and Bijwara)., & it covered 60 growers (each village 20 growers) in the selected villages. Data collected for study pertaining to the period 2018-19. Primary data was collected from selected Rose, Marigold and Chrysanthemum growers through personal interview method with the help of pretested schedules for getting the information on Constraints in the Production and Marketing of Rose, Marigold and Chrysanthemum related aspects was used. The collected data were complied, tabulated and analyzed to accomplish the objectives of the present study.

Constraints faced by the growers

In order to study the constraints, a schedule was developed in accordance with the available literature. Accordingly, constraints were identified and sub divided into production and marketing constraints and thereafter the response of the sample farmers were recorded. The data will be analyzed by using simple statistical tools such as Garrett's Ranking Technique.

Analytical Tools

Garrett's Ranking Technique:

The ranks given by the respondents were then converted into percentage position with the help of formula given by Garrett. Garrett's formula for converting ranks into per cent is:

$$\text{Percent position} = \frac{100(\text{Rij-0.5})}{\text{N}}$$

Where, Rij is the rank given to ith item by the jth individual and N is the number of item ranked by the jth individual.

The per cent position of each rank thus obtained was converted into scores using Garrett's table. Then for each reason the scores of individual respondents were added and divided by the total number of respondents. Thus the mean score for each constraints was ranked by arranging them in a descending order.

RESULTS AND DISCUSSION

1. Production constraints faced by Rose growers

The Rose growers faced by various types of Production constraints in the study area. It is presented in Table 1.1.

Table 1.1 Production constraints faced by the Rose growers (N=60)

S. No.	Production constraints	No. of beneficiaries	Garrett's Mean Scores	Rank
1.	Inadequate knowledge of recommended package and practices	47	77.50	I
2.	Unfavorable weather conditions	47	77.50	II
3.	Lack of knowledge about latest production technology	46	75.83	III
4.	Lack of adoption of plant protection measures	45	74.16	IV
5.	Non-availability of HYV seed	42	69.16	V
6.	Non-availability of Credit	42	69.16	VI
7.	Assistance by Government	41	67.50	VII
8.	Availability of Input	28	45.83	VIII
9.	Non-availability of quality water for irrigation	17	27.50	IX
10.	Poor quality land	13	20.83	X

It is also clear from the table 1.1 that the major Production constraint faced by most of the Rose growers was inadequate knowledge of recommended packages and practices of Rose crops with a score of 77.50 (rank I). Keeping this in view, there was a strong need to strengthen extension services amongst the Rose growers in the study area. The second most important constraint faced by the Rose growers was unfavorable weather condition (overall Garrett score 77.50) i.e. delayed precipitation during Rainy season or excessive rainfall or prevalence of winter rains. The other most important constraints reported by the Rose growers were Lack of knowledge about latest production technology overall Garrett score 75.83 (rank III), Lack of adoption of plant protection measures overall Garrett score 74.16 (rank IV) and Non-availability of HYV seed overall Garrett score 69.16 (rank V). In addition to the above problems, the minor problems faced by also the Availability of Input (VIII), Non-availability of quality water for irrigation (IX), and Poor quality land (X) in the study area.

Marketing constraints of Rose growers:

The Rose growers faced by various types of marketing problems in the study area. It is presented in Table 1.2.

Table 1.2: Marketing constraints faced by the Rose growers (N=60)

S. No.	Marketing constraints	No. of beneficiaries	Garrett's Mean Scores	Rank
1.	Lack of scientific storage facilities	57	94.16	I
2.	Lack of scientific knowledge and training	55	90.83	II
3.	Price fluctuations	55	90.83	III
4.	Lack of availability about market news	53	87.50	IV
5.	**Problem faced due small quantity of marketable surplus**	52	85.83	V
6.	High cost of transportation	52	85.83	VI
7.	Higher commission charges	51	84.16	VII
8.	Lack of skilled labour for grading of flower	47	77.50	VIII
9.	Delay in payment	41	67.50	IX
10.	**Lack of demand of produce in local area**	31	50.83	X

From the contents of Table 1.2, it was indicated that Lack of scientific storage facilities was ranked as the most important constraint among the Rose growers with mean score value of 94.16 (rank I) followed by Lack of scientific knowledge and training overall Garrett score 90.83 (rank II). Price fluctuations was ranked mean score value of 90.83 (rank III), Market news and intelligence were not available for most of Rose growers which got rank VI with a score of 87.50. Fifth major constraint reported by the Rose growers was involvement of large number of intermediaries in the marketing which resulted in decrease of farmer's share in consumer's rupee overall Garrett score 85.50 (rank V). In addition to the above problems, High cost of transportation (VI), higher commission charges (VII), Lack of skilled labour for grading of flower (VIII). The minor problems faced by also the Delay in payment (IX) and Lack of demand of produce in local area (X) in the study area.

2. Production constraints faced by Marigold growers

Marigold growers faced by different types of Production constraints in the study area. It is presented in Table 2.1.

Table 2.1 Production constraints faced by the Marigold growers (N=60)

S. No.	Production constraints	No. of beneficiaries	Garrett's Mean Scores	Rank
1.	Inadequate knowledge of recommended package and practices	47	77.50	I
2.	Unfavorable weather conditions	45	74.16	II
3.	Lack of knowledge about latest production technology	41	67.50	III
4.	Lack of adoption of plant protection measures	41	67.50	IV
5.	Non-availability of HYV seed	37	69.16	V
6.	Non-availability of Credit	31	50.83	VI
7.	Easy to cultivate	31	50.83	VII
8.	Availability of Input	28	45.83	VIII
9.	Non-availability of quality water for irrigation	17	27.50	IX
10.	Poor quality land	13	20.83	X

It is also clear from the table 2.1 that the major Production constraint faced by most of the Marigold growers was inadequate knowledge of recommended packages and practices of Marigold crops with a score of 77.50 (rank I). Keeping this in view, there was a strong need to strengthen extension services amongst the Marigold growers in the study area. The second most important constraint faced by the Marigold growers was unfavorable weather condition (overall Garrett score 74.16) i.e. delayed precipitation during Rainy season or excessive rainfall or prevalence of winter rains. The other most important constraints reported by the Marigold growers were Lack of knowledge about latest production technology overall Garrett score 67.50 (rank III), Lack of adoption of plant protection measures overall

Garrett mean score 67.50 with rank IV and Non-availability of HYV seed overall Garrett score 69.16 (rank V). In addition to the above problems, the minor problems faced by also the Easy to cultivate (VII), Availability of Input (VIII), Non-availability of quality water for irrigation (IX), and Poor quality land (X) in the study area.

Marketing constraints by Marigold growers

Marigold growers faced by various types of marketing problems in the study area. It is presented in Table 2.2.

Table 2.2: Marketing constraints faced by the marigold growers (N=60)

S. No.	Marketing constraints	No. of beneficiaries	Garrett's Mean Scores	Rank
1.	Lack of scientific storage facilities	56	92.50	I
2.	Price fluctuations	54	89.16	II
3.	Lack of availability about market news	54	89.16	III
4.	**Problem faced due small quantity of marketable surplus**	52	85.33	IV
5.	Lack of scientific knowledge and training	50	82.50	V
6.	High cost of transportation	49	80.83	VI
7.	Higher commission charges	49	80.83	VII
8.	Lack of skilled labour for grading of flower	48	79.16	VIII
9.	Delay in payment	38	62.50	IX
10.	**Lack of demand of produce in local area**	31	50.83	X

From the contents of Table 2.2, it was indicated that Lack of scientific storage facilities was ranked as the most important constraint among the Marigold growers with mean score value of 92.50 (rank I) followed by Price fluctuations overall Garrett score 89.16 (rank II). Lack of availability about market news was ranked mean score value of 89.16 (rank III), Fourth major constraint reported by the Marigold growers was involvement of large number of intermediaries in the marketing which resulted in decrease of farmer's share in consumer's rupee overall Garrett score 85.33. Lack of scientific knowledge and training Market news and intelligence were not available for most of Marigold growers which got rank V with a score of 82.50. In addition to the above problems, High cost of transportation (VI), higher commission charges (VII), Lack of skilled labour for grading of flower (VIII). The minor problems faced by also the Delay in payment (IX) and Lack of demand of produce in local area (X) in the study area**.**

3. Production constraints faced by Chrysanthemum growers

Chrysanthemum growers faced by various types of Production constraints in the study area. It is presented in Table 3.1.

Table 3.1 Production constraints faced by the Chrysanthemum growers (N=60)

S. No.	Production constraints	No. of beneficiaries	Garrett's Mean Scores	Rank
1.	Inadequate knowledge of recommended package and practices	49	80.83	I
2.	Unfavorable weather conditions	47	77.50	II
3.	Lack of knowledge about latest production technology	47	77.50	III
4.	Lack of adoption of plant protection measures	45	74.16	IV
5.	Non-availability of HYV seed	44	72.50	V
6.	Non-availability of Credit	42	69.16	VI
7.	Easy to cultivate	42	69.16	VII
8.	Availability of Input	28	45.83	VIII
9.	Non-availability of quality water for irrigation	18	29.16	IX
10.	Poor quality land	14	22.50	X

It is also clear from the table 3.1 that the major Production constraint faced by most of the Chrysanthemum growers was inadequate knowledge of recommended packages and practices of Chrysanthemum crops with a score of 80.83 (rank I). Keeping this in view, there was a strong need to strengthen extension services amongst the Chrysanthemum growers in the study area. The second most important constraint faced by the Chrysanthemum growers was unfavorable weather condition (overall Garrett score 77.50) i.e. delayed precipitation during Rainy season or excessive rainfall or prevalence of winter rains. The other most important constraints reported by the Chrysanthemum growers were Lack of knowledge about latest production technology overall Garrett score 77.50 (rank III), Lack of adoption of plant protection measures overall Garrett mean score 74.16 with rank IV and Non-availability of HYV seed overall Garrett score 72.50 (rank V). In addition to the above problems, the minor problems faced by also the Non-availability of Credit (VI), Easy to cultivate (VII), Availability of Input (VIII), Non-availability of quality water for irrigation (IX), and Poor quality land (X) in the study area.

Marketing constraints of Chrysanthemum growers:

Chrysanthemum growers faced by various types of marketing problems in the study area. It is presented in Table 3.2.

Table 3.2: Marketing constraints faced by the Chrysanthemum growers (N=60)

S. No.	Marketing constraints	No. of beneficiaries	Garrett's Mean Scores	Rank
1.	Lack of scientific storage facilities	57	94.16	I
2.	Lack of scientific knowledge and training	56	92.50	II
3.	Price fluctuations	55	90.83	III
4.	Lack of availability about market news	54	89.16	IV
5.	**Problem faced due small quantity of marketable surplus**	52	85.83	V
6.	High cost of transportation	52	85.83	VI
7.	Higher commission charges	51	84.16	VII
8.	Lack of skilled labour for grading of flower	49	80.83	VIII
9.	Delay in payment	41	67.50	IX
10.	**Lack of demand of produce in local area**	31	50.83	X

From the contents of Table 3.2, it was indicated that Lack of scientific storage facilities was ranked as the most important constraint among the Chrysanthemum growers with mean score value of 94.16 (rank I) followed by Lack of scientific knowledge and training overall Garrett score 92.50 (rank II). Price fluctuations was ranked mean score value of 90.83 (rank III), Market news and intelligence were not available for most of Chrysanthemum growers which got rank VI with a score of 89.16. Fifth major constraint reported by the Chrysanthemum growers was involvement of large number of intermediaries in the marketing which resulted in decrease of farmer's share in consumer's rupee overall Garrett score 85.50 (rank V). In addition to the above problems, High cost of transportation (VI), higher commission charges (VII), Lack of skilled labour for grading of flower (VIII). The minor problems faced by also the Delay in payment (IX) and Lack of demand of produce in local area (X) in the study area.

CONCLUSION

It is clear concluded that as - (i) The major common production constraints for Rose, Marigold and Chrysanthemum growers, i.e. inadequate knowledge of recommended packages and practices, Unfavorable weather conditions, Lack of knowledge about latest production technology and Non-availability of HYV seed, etc. in the study area.

(ii) The major common Marketing constraints for Rose, Marigold and Chrysanthemum growers, i.e. Lack of scientific storage facilities, Lack of scientific knowledge and training, Price fluctuations, Market news and intelligence and higher transportation costs, etc. in the study area.

SUGGESTIONS:

There is a fear as the trends show that the area and production of Rose, Marigold and Chrysanthemum in Uttar Pradesh state will decline further in the coming time and the flowers are very important source of income and employment, therefore following suggestions are made to improve the performance of cut & loose flowers i.e. Rose, Marigold and Chrysanthemum in Baghpat district-

- ✓ Flowers crops should be introduced as an inter-crop/mixed-crop/rotational crop in the cropping system. Some financial incentives should be given to the farmers for bringing more area under flowers crops.
- ✓ High yielding varieties of flowers suited to dry farming/moisture-stress conditions need to be evolved and should make available to the farmers.
- ✓ Proper guidance should be provided to the flower growers about the use of recommended practices and production techniques.
- ✓ Quality inputs like improved seeds, adequate credit facility must be available timely and at village level (sometimes even at block levels).
- ✓ Adequate storage facilities should be provided to the farmers, to spread the sale throughout the year with minimum quantitative and qualitative losses.
- ✓ Focus should be made on providing the market information like prices, arrivals etc. to the farmers through SMS.

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