

# An Economics Analysis of Rose Production System in Pushkar Sub-Tehsil of Ajmer

Dr. Gayatri Tanwar

Research Associate - International Institute of Education and Research, Jaipur

**Abstract:** *The Rose has been a symbol of love, beauty, even war and politics from way back in time. The variety, color and even number of Roses carry symbolic meanings. The Rose is most popularly known as the flower of love, particularly Red Rose. Roses have been the most popular choice of flowers for the purpose of gifting across the world. They also act as a great addition to home and office decor. A bunch of roses or even a single rose works wonders aesthetically and considerably enlivens a place. Besides fresh cut roses, artificial flowers like silk roses in different colors are also widely used as decoration. Pushkar gets its name from the blue lotus but it is the beautiful rose that the town is famous for. The town is home to several nurseries and a flourishing cottage industry of rose products. Rose products – such as rose water, rose oil, gulkand etc – therefore make for must-buy things from Pushkar.*

**Keywords:** cut roses, export, import, area, production and percent share

## 1. Introduction

Floriculture is the art and knowledge of growing flowers to perfection. It deals with the cultivation of flowers and ornamental crops from the time of planting to the time of harvesting. It also includes production of planting materials through seeds, cuttings, budding, grafting and marketing of flowers and flower products. Perfume industry and Pharmaceutical sector depends upon it.

India is bestowed with several agro-climatic zones conducive for production of sensitive and delicate floriculture products. The country's total horticulture production is estimated to rise marginally to 314.87 million tonne in the 2019-20 crop year. The area under horticulture crop also rose 25.6 millionhectare from 25.43 million hectare.

The Indian floriculture market was worth INR 157 billion in 2018. The market is further projected to reach INR 472 billion by 2024, growing at a CAGR of 20.1 % during 2019-2024. Floriculture also known as flower farming refers to the cultivation of flowering and ornamental plants. Although flowers have been an integral part of the Indian society and were cultivated for various purposes ranging from aesthetic to social and religious purpose, the commercial floriculture industry has been of recent origin. A strong increase in the demand for cut and loose flowers has made floriculture as one of the important commercial trades in Indian agriculture.

Roses are one of the most popular garden plants. They may be used as flowering shrubs in the landscape, but they are at their best in properly spaced solid plantings. Anyone can grow roses. Some gardeners try to grow too many varieties or blooms and give far more pleasure than 50 poorly maintained plants. too many plants for the space available. Ten well-chosen varieties, carefully maintained, produce more It is one of the nature' beautiful creations and is universally known as the Queen of Flowers. The cultivation of this flower has developed with the distillation of rose as mentioned in Ayurveda by Charaka around 100 A.D. At present, it has become the most important commercial flower.

A large quantity of rose flowers is used for decoration purpose. Besides, it has been growing for flavouring sweets and other food articles as well as for sprinkling over guests on festive occasions. Hips of some rose species are rich in vitamin C while its petals are used for preparing *Gulkand* and *Pankhuri*.

Rajasthan has decided to take the ornamental path to tap the booming flower market by proactively promoting cultivation of decorative flowers like orchid, bird paradise and anthurium in select districts.

Flower business in the state remains normally picks up during the festival and marriage seasons. In routine days, demand of over 50, 000 kg flowre centre which is a big flower centre in the state. Pushkar, Jaipur, Kota, Bharatpur are the main areas for flower cultivation in present and Pushkar is known world over for rose farming. The present farming of marigold rose and other flowers are fulfilling the daily needs of temple towns within and outside the state.

Whereas Pushkar town – a rose hub – fulfill the demand of roses in the market of Ajmer dargarh, areas in eastern parts of the state produces marigold and the flowers are sent to towns outside the state such as Mathura, Vrindavan and Varanasi in Uttar Pradesh keeping in mind the increasing importance of Rose in Pushkar, the study was undertaken to examine the constraints to rose production and marketing. Suitable policy measures are suggested for efficient and effective value chain for enhancing the profitability of rose production system in a sustainable manner.

## 2. Data and Methodology

The primary data on socio-economic aspects along with different input costs, yields, returns and employment in flower cultivation was collected through personal interview of the respondents with the help of specially structured and pre-tested schedule. For primary data collection, a cluster of six gram panchayats namely Ganahead, Devnagar, Nand, Khori, Kadel and Tilora were selected form Pushkar Sub-Tehsil of Ajmer. A list of rose growers were prepared with the help of officials of horticulture Department and rose

Volume 9 Issue 6, June 2020

[www.ijsr.net](http://www.ijsr.net)

Licensed Under Creative Commons Attribution CC BY

grower of sample size of 5 from each gram panchayat were selected through random sampling method for depth study. Tubular analysis was employed to study the establishment costs on rose garden, costs and employment potential in rose

production. The data have been analysed by panel data analysis and simple average, percentages and growth rates. This study relates to year 2019-20.

### 3. Results and Discussion

**Table 1:** Land use pattern and Production of Rose in Sub-Tehsil of Ajmer:-

S. No.	Name of Area	Total Geographical Area (ha)	Land available for Cultivation (ha)	Rose Cultivation Area (ha)	Rose Production (tone)
1	Pushkar	1726	294	65	195
2	Devnagar	2863	1176	215	860
3	Tilora	2428	913	60	120
4	Ganaheda	1452	844	218	872
5	Nand	3094	1650	65	162.5
6	Khori	2685	1102	30	60
7	Kadel	3308	1183	85	297.5
	<b>Total</b>	<b>17556</b>	<b>7162</b>	<b>738</b>	<b>2567</b>

**Source:** Data based on personal interview

The table above reveals the 17556 (ha) Geographical area of rose production in Pushkar. Further table reveals that area for production is 7162 (ha) and area of rose cultivation was

found 738 (ha). Total rose production in Pushkar was found 2567 tone.

**Table 2:** Areas of Production and Productivity in Gram-Panchayats 2019-20 (Hactore)

Gram-Panchayts	Rose cultivation area (hac.)	Rose production (tone)	Productivity
Devnager	215 (31.95)	860 (37.19)	4 (22.22)
Tilora	60 (8.19)	120 (5.19)	2 (11.11)
Ganaheda	218 (32.39)	872 (37.71)	4 (22.22)
Nand	65 (9.66)	162.5 (7.02)	2.5 (13.88)
Khori	30 (4.46)	60 (2.59)	2 (11.11)
Kedel	85 (12.63)	297.5 (12.86)	3.5 (19.44)
Total	673 (100.00)	2312 (100.00)	18 (100.00)

**Source:** Data based on personal interview

The Table above reveals the production of roses in Pushkar during the year 2019-20. In Ganaheda 872 maximum production and lowest productivity was found in Tilora, Nand and Khori whereas highest in Ganaheda and Devnager.

#### Establishment cost

Rose is a perennial crop which requires high investment on the establishment of rose garden. The total cost of

establishing one hectare of land is estimated to be about Rs. 1, 37, 000 in Pushkar. (Table 3) The item-wise establishment cost shows that planting material alone accounted for 36.49 percent of the total variable cost and fixed cost. The FYM (farm yard manure) and Fertilizers were the other major items of the cost, which accounted for 34.66 percent and this was followed by weeding, irrigation and land preparation costs. The results show that they yielded 2 to 4 tonnes per hectare.

**Table 3:** Establishment Costs of Rose Garden in Pushkar Sub-Tehsil of Ajmer (Rs / ha)

S. No	Components	Rs	% of T/C (VC+FC)
1	Seed & planting materials	50, 000	36.49
2	Land preparation (Animal labour& digging of pits)	35, 000	25.54
3	Labour (manure application, weeding, irrigation & pesticide)	12, 500	9.12
4	Transplantation	2, 000	1.45
5	Pesticide cost	5, 000	3.64
6	Fertilizer Cost	10, 500	7.66
7	Manure cost	2, 000	1.45
8	Electricity charges	5, 000	3.64
9	Total Variable cost	1, 22, 000	89.05
10	Total Fixed cost	15, 000	10.94
11	Total (VC + FC)	1, 37, 000	100.00

**Source:** Data based on personal interview

**Table 4:** Cost and Returns of Rose Garden in Pushkar

S. No	Components	Rs.	% to Total
1	Seed & planting materials	5,000	5.91
2	Labour includes Family & hired Labour	9,600	11.35
3	Bullock labour	500	0.59
4	Farmyard manure	2,000	2.36
5	Fertilizer cost	10,500	12.41
6	Pesticide cost	5,000	5.91
7	Electricity charges	5,000	5.91
8	Market cost	35,000	41.37
9	Total variable cost	72,600	85.10
10	Total fixed cost	12,000	14.18
11	Total (VC + FC)	84,600	100.00

**Source:** Data based on personal interview

#### Employment Generation from Rose Flower

Several studies carried out in the country have highlighted the employment potential of these crops. A majority of these studies have indicated that flower crops generate more employment than food crops and horticulture crops. The present study although not estimated the generation of employment in food crops, has made an attempt to estimate the employment generation across major traditional floricultural crops. These details have been presented in **Table-(5)**. As per the table, the highest number of man-days of employment generation was noticed in rose cultivation with 1,744 man-days per hectare in Ganaheda, 1,720 man-days in Devnagar and 680 in Kadel. One important factor that one noticed was that the employment of female labour was higher in the cultivation of flowers except rose.

**Table 5:** Employment Generation of Rose Flower from year 2019-20

Name of Gram-Panchayats	Name of Gram-Panchayats		
	Male	Female	Total
Ganaheda	1000	744	1744
Devnagar	1050	670	1720
Nand	330	190	520
Tilora	300	180	480
Khori	150	90	240
Kadel	488	192	680
Total	3318	2066	5384

**Source:** - Data based on personal interview

#### Marketing

A perusal of Table 6 showed that total marketing cost incurred was Rs 45699 per hactor and Rs 0.096 per piece of rose. Further among total marketing activities, transportation cost constituted maximum share (41 per cent) followed by loading and unloading charges (32 per cent). Commission charges were not found to be charged for marketing of rose flowers.

**Table 6:** Marketing cost of rose flower

Particulars	In Percentage
Loading and unloading	34.08
Transport	41.62
Spoilage	20.00
Packing	10.5
Total marketing cost (Rs. Pre hec.)	45699
Total marketing cost (Rs.per stem)	0.096

**Source:** Data based on personal interview

#### 4. Summary and Conclusions

There was an impressive growth in the area under rose cultivation in most of the major rose growing districts in Ajmer. However, the instabilities was also very high in most of the districts. The selected farmers have devoted a good proportion of area under rose cultivation. Although, the rose cultivation requires high establishment, cultivation and marketing costs, the cultivation of rose was generating impressive and equitable returns to the farmers. The farmers were also efficient in rose cultivation. Further, the production system was generating good employment opportunities for farm family as well as agricultural labourers especially for female workers. Although, some inbound logistics (such as the planting material was supplied by the traders), outbound logistics (as the flowers were transported through the common vehicle) and marketing activities (as the flowers were marketed mainly through the pre-trade agreement between the rose growers and traders at fixed prices) were practiced, there is no effective value chain in the rose production. Due to this, the farmers have faced many constraints in the cultivation and marketing of rose flower.

The finding of the study suggested some value chain activities as development of long stem, high price level, rose market in Pushkar is much unorganized, lack of new technologies, cheap loan facilities and create values in rose production.

#### References

- [1] Goyal, S.K. 1999. Economics of rose cultivation and its marketing in Sonapat district of Haryana, Indian Journal of Agricultural Marketing, 13(3): 44-51.
- [2] Guledagudda, S.S. 1996. Production and marketing of flowers in Dharwad district, Karnataka: An economic analysis, Unpub. M.Sc.(Agri.) thesis submitted to U.A.S., Dharwad.
- [3] Jyothi, S.H. and Raju, V.T. 2003. Study on marketing of Crossandra, Jasmine and Rose flowers in East Godavari District of Andhra Pradesh, Agricultural Marketing, 46(2): 2-4.
- [4] Pushpalatha, M.C., Reddy, T.V. and Reddy, B.V.C 1997. Economics of rose production in Bangalore district of Karnataka, Financing Agriculture, 28(1): 10-14.

- [5] Singh, H.P. 2009. Floriculture industry in India, National Conference on Floriculture for Livelihood and Profitability, 16-19 th March, IARI, New Delhi.
- [6] Sivaramane, N., Kumar, A., Singh, D.R. and Arya, P. 2008. An economic analysis of traditional and hi-tech Rose cultivation, Journal of Ornamental Horticulture, 11(1): 21-26.
- [7] Sudha, M. 2001. Economics of protected cultivation of cut-rose for international markets: role of price prediction models in integrating production with marketing, Agricultural Economics Research Review, 14(1): 1-15.
- [8] Ali A, et al. An econometric estimation of post-harvest losses of cut flowers in Punjab, Pakistan. Pak J Sci. 2016; 68:272-279.
- [9] Harisha BN. The Proceedings of the Sixth Middle East Conference on Global Business, Economics, Finance and Banking (ME17 Dubai Conference), Dubai - UAE. 6-8 (October 2017). Paper ID: D748, 2017.
- [10] Mishra NK and Mishra DP. A study on entrepreneurial challenges of floriculture in Odisha. Int J Comp Eng Res Trend