



P-ISSN: 2349-8528

E-ISSN: 2321-4902

www.chemijournal.com

IJCS 2020; 8(2): 1437-1441

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Received: 18-01-2020

Accepted: 20-02-2020

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Marketing of gerbera flowers in Nagpur district of Maharashtra

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DOI: <https://doi.org/10.22271/chemi.2020.v8.i2v.8967>

Abstract

The study was carried out on “Marketing of Gerbera Flowers in Nagpur District Maharashtra” in Kalmeshwar, Saoner and Nagpur (Rural) tahsils of Nagpur district during year 2014-15 based on primary data and the sampling design adopted for multistage sampling. The information about marketing of gerbera regarding total marketing cost, market margin, and price spread was computed on the basis of collection of data by selecting appropriate number of intermediaries from Nagpur market.

The total capital investment in gerbera cultivation under polyhouse was worked out to Rs. 1271654.15. The cost of cultivation at Cost ‘A’, Cost ‘B’ and Cost ‘C’ were Rs. 444089.19, Rs. 625547.66 and Rs. 638049.66, respectively. The yield obtained by farmer for 1008 m² was 338822th number of flowers with the gross returns was Rs. 950395.71. The per flower cost of production was Rs. 1.88. The net returns obtained at various costs were Rs. 506306.52 at Cost ‘A’, Rs. 324848.05 at Cost ‘B’ and Rs. 312346.05 at Cost ‘C’. The break-even point at monetary level without subsidy obtained at Rs. 1271654.00 and with subsidy was at Rs. 635827.00. The net price received by producer was Rs. 23.00 per bundle. The selling price of retailer was Rs.101.36 per bundle. The total marketing cost and market margin were Rs. 6.01 and Rs. 72.35 per bundle, respectively. Following important channel of distribution have been observed while marketing the gerbera flower under study area was Producer→Commission agent→Retailer→Consumer. The market efficiency in channel operated in selected market for study was calculated to 15.86. In marketing problems displeasure expressed by the growers because of very low price realized in winter season (90.00 per cent) was major problem and it was followed by heavy commission charges (90.00 per cent).

Keywords: Market efficiency, market margin, break-even point

Introduction

Gerbera (*Gerbera jamesonii* L.) also commonly known as “Transval Daisy” is an important cut flower grown throughout the world, with long stalks and daisy-like flower, belongs to the family Asteraceae. A constant increase in demand for cut flowers has made floriculture as one of the important commercial trades in Indian agriculture. Gerbera is a very attractive, commercial cut flower successfully grown under different conditions in several areas of the world as well as in India and meeting the requirements of various markets. This flower is originated in Asia and South Africa. Gerbera as a cut flower has tremendous demand in domestic and international markets. Though, different varieties of gerbera exist in Maharashtra, none has been officially released. Hence, it is needed to evaluate varieties for their vegetative, yield and quality characters and finally to recommend the suitable variety for the agro-climatic conditions of Maharashtra. Considering the above facts, the present research work was planned to study the capital investment, costs & returns of Gerbera production.

The floriculture as a commercial venture has become a hi-tech activity under controlled climatic conditions inside polyhouse/greenhouse. Polyhouse cultivation as well as other modes of controlled environmental cultivation have been evolved to create favourable microclimates in which flowers or crops production could made possible all throughout the year required. Polyhouse flowers or crop production offers means for moving forward greater degree of environmental control. The extend of control, vary from more protection from rain to complete environmental control. Major factors influenced on light, temperature, atmospheric condition and the root environment. (www.indianfloriculture.com). It creates better environment for faster and healthy growth of plants. The quality of flowers is superior in polyhouse in regard to appearance and size. The plants are protected from high radiation of sunlight and atmosphere

changes like heavy rain, moist, cold in winter, which helps to achieve the required condition for excellent growth of crops. This is most important that polyhouse gives advantage of growing crops in off season as environmental condition are controlled under polyhouse.

The total area under floriculture crops in India was estimated to be 191 thousand ha. with production of 17.14 lakh tonnes of loose flowers and 746.77 crores number of cut flowers. The total export of flowers and floriculture products in India during 2013-2014 was 3,09,26,023 MT and revenue Rs.365.32 crores (APEDA-2014). Total area under floriculture in Maharashtra was estimated to be 23,000 ha. with the production of 122.7 thousand tonnes of loose flowers and 44 lakhs numbers of cut flowers (Indian Horticulture Database – 2014). The total area under floriculture in Nagpur was estimated to be 951 ha. and 985.12 ha. during 2013-14 and 2014-15 with the production of 7353.60 tonnes and 7553.47 tonnes during 2013-14 and 2014-15 respectively (DSAO, Nagpur).

An objective of proposed study was to analyse the marketing of Gerbera flowers and to identify the problems faced by growers in marketing of gerbera flowers.

Methodology

Selection of area

The study was undertaken in Nagpur district of Vidarbha region.

Selection of sample

The sampling design adopted for multistage sampling. In the first stage, Nagpur district was selected taking into consideration the area concentrated under cultivation of Gerbera. In second stage, three tahsils viz. Kalmeshwar, Saoner and Nagpur (Rural) were selected on the basis of concentration of Gerbera cultivation and availability of data. In third stage, six villages from each tahsil were selected.

Selection of period

The primary data were pertained to the year 2014-15.

Source of data

The data were collected for the year 2014-15 through pretested, well-structured schedule was used for collection of relevant information with the help of personal interview method.

The Netaji market was selected, where large trading of cut flower and loose flower take place. Hence, it has been purposively chosen for the present study. It is located adjacent to the Sitabardi and city bus station. Market agencies involved in marketing of Gerbera, five commission agents and five retailers were selected for present study. The information regarding marketing cost, market margin, price and related problems were collected for the interpretation.

Marketing of gerbera flowers

The information about marketing of gerbera regarding total marketing cost, market margin, and price spread were computed on the basis of collection of data by selecting appropriate number of intermediaries from Nagpur market.

Marketing channel

Channel - I – Producer → Commission agent → Retailer → Consumer.

Economics of gerbera

Economics of gerbera were worked out by using the standard cost concepts i.e. cost A, cost B, and cost C.

Analytical tool

a) Break-even analysis (BEP)

It is the intersection of the total revenue and the total cost. At this point, there exist 'no profit and no loss' situation. However, as the total profit increases with the increase in output.

i) The computation of BEP in quantity is calculated as follows:

$$\text{BEP}_{(\text{quantity})} = \frac{F}{(P-V)}$$

Where,

F= Fixed investment for polyhouse

P= Per flower average price (Rs.)

V= Average variable cost per flower (Rs.)

ii) The computation of BEP in monetary value is calculated as follows:

$$\text{BEP}_{(\text{monetary value})} = \frac{F}{\left[1 - \frac{V}{P}\right]}$$

Marketing efficiency

Marketing efficiency of Gerbera flower marketing was estimated with the help of Shepherd's formula as follows:

$$\text{ME} = \frac{V}{I} - 1$$

Where,

ME = Shepherd's Index of marketing efficiency

V = value of goods sold (consumer's price)

I = Total marketing costs.

Results and discussion

Distribution of growers according to one channel

In marketing following important channel of distribution of produce has been observed while studying the marketing of gerbera flower under study area.

Channel

Producer → Commission agent → Retailer → Consumer

The producer sold their produce through this channel i.e.

Producer → Commission agent → Retailer → consumers.

Because of the producer had no time to sold their produce direct in market hence the producer choose this channel. The distribution of growers and quantity sold through channel was presented in Table 1.

Table 1: Channel wise quantity sold of gerbera flowers (1 Bundle= 10 flowers)

S. No.	Channels	No. of Gerbera growers	Total quantity sold (bundle)
1	Channel (Producer → Commission agent → Retailer → Consumer)	20 (100.00)	33882 (100.00)

(Figures in parentheses indicate the percentage to the total)

It revealed that the total quantity sold by 20 gerbera growers were 33882 bundles of flower. The per bundle flower was 10 in number. The total quantity of gerbera flower was sold

through commission agent as first sale point. It is concluded from above discussion that, the total quantity of produce moves through this channel i.e. 100.00 per cent.

Marketing cost and market margin of gerbera flower

For selling the produce in wholesale market, the seller has to pay for certain market services from a sale proceeds. This is called as marketing cost. Marketing cost incurred by producer mainly involves expenditure on packaging material, grading,

packing and labelling, transportation, and sales commission etc. marketing cost incurred by gerbera cultivator, commission agent and retailers in marketing of gerbera flower. The marketing cost incurred in marketing of gerbera flower was presented in Table 2.

Table 2: Marketing cost and market margin of Gerbera flower. (Rs./Bundle)

S. No.	Particulars	Total price Marketing channel
A	Marketing cost incurred by producer	
1	Packaging material	1.50
2	Grading	0.060
3	Packing and labelling	0.19
4	Transportation	0.50
5	sale commission @ 10%	2.80
6	Total Market cost	5.05
7	Selling Price of Producer	28.05
B	Marketing cost incurred by commission agent	
1	Shop rent	0.22
2	Total Market cost	0.22
3	Selling Price of Commission agent	38.05
4	Profit of Commission agent	9.78
C	Marketing cost incurred by retailer	
1	Transportation	0.20
2	Storage	0.19
3	Shop rent	0.35
4	Total Market cost	0.74
5	Selling Price of retailer / Purchase price of consumer	101.36
6	Margin of retailer	62.57
D	total marketing cost	6.01
E	total margin	72.35

It revealed that, the total marketing cost incurred was Rs. 6.01 per bundle. The selling price of producer was Rs. 28.05 per bundle. The highest marketing charges paid for sales commission i.e. Rs. 2.80 per bundle followed by packing material, transportation, packing and labelling and grading were Rs. 1.50, Rs. 0.50, Rs. 0.19, Rs. 0.060 per bundle, respectively. The total marketing cost incurred by producer was Rs. 5.05 per bundle. The market margin of commission

agent and retailer was Rs. 9.78 and Rs. 62.57 per bundle, respectively. The total marketing cost was Rs. 6.01 per bundle and the total margin received by commission agent and retailer was Rs. 72.35 per bundle.

Producers' share in consumer's rupee

Producer's share in consumer's rupee of Gerbera was described in Table 3.

Table 3: Price spread in marketing of gerbera through channel. (Rs. / Bundle)

S. No.	Particulars	Total Price Channel
1	Net Price received by Producer	23.00 (22.69)
2	Total Marketing cost	6.01 (5.93)
3	Total market margin	72.35 (71.38)
4	Selling price of retailer/ Purchase price of consumer	101.36 (100.00)

(Figures in parentheses indicate the percentage to the total)

The net price received by producer was Rs. 23.00 per bundle. The producer's share in consumer's rupee was 22.69 per cent, because, there are large numbers of intermediaries. The total marketing cost incurred by producer, commission agent and retailer was Rs. 6.01 per bundle. Total market margin of commission agent & retailer was Rs. 72.35 per bundle. The selling price of retailer or purchase price of consumer was Rs.101.36 per bundle. It indicates that, the selling of gerbera flower through this channel i.e. producer to commission agent to retailer to consumer is very remunerative channel for growers who are engaged in production of gerbera flowers. In

marketing of gerbera, producer's share in consumer's rupee is more.

Marketing efficiency of gerbera flower

Marketing efficiency of gerbera flower for two marketing channel were estimated with the help of Shepherd's formula as follows

$$ME = \frac{V}{I} - 1$$

Where,
ME = Shepherd's Index of marketing efficiency

V = value of goods sold (consumer's price)
I = Total marketing costs

Table 4: Marketing efficiency of gerbera flower

S. no.	Channel	Market efficiency
1	Producer → commission agent → Retailer → Consumer	15.86

It is revealed that marketing efficiency in channel operated in selected market for study was calculated to 15.86. It is proved

that, the market selected for study is efficient for gerbera marketing.

• 5 Break-even analysis of gerbera flowers

Table 5: Break even analysis of Gerbera flower. (per 1008m²)

S. No	Particulars	Gerbera
1	Annual flower production (No.)	338822.00
2	i. Total capital investment without subsidy (Rs.)	1271654.00
	ii. Total capital investment with subsidy (Rs.)	635827.00
3	Per unit price (Rs.)	2.80
4	Per unit variable cost (Rs.)	1.31
5	Break-even quantity without subsidy (No. of flower)	454162.14
6	Break-even quantity with subsidy @ 50% (No. of flower)	227081.07
7	Break-even point at monetary level without subsidy (Rs.)	1271654.00
8	Break-even point at monetary level with subsidy @ 50% (Rs.)	635827.00

The annual flower production of gerbera was 338822th number of flower. The total capital investment without subsidy for gerbera cultivation was Rs.1271654 and with subsidy (@ 50%) was Rs. 635827. The per unit price for gerbera flower was Rs. 2.80 and the per unit variable cost Rs. 1.31. The break-even point without subsidy was obtained at 454162th number of flowers and with subsidy (@ 50%) it was at 227081th number of flowers. The break-even point at monetary level without subsidy obtained at Rs. 1271654.00 and with subsidy was at Rs.635827.00.

All the selected gerbera growers were interviewed for the problems they faced for marketing of Gerbera flower. The information regarding the important problems faced by the growers is presented in Table 6. Marketing problems, displeasure express by the growers because of very low price realize in winter season was expressed by 19 (95.00 per cent) growers. Heavy commission charges was expressed by 18 (90.00 per cent) growers. Non-availability of precooling and cold storage facilities was expressed by 13 growers (65.00 per cent) and delay in payment to farmer was expressed by 12 (60.00 per cent) growers.

6. Problem faced by growers in marketing of Gerbera flower

Table 6: Problem faced by growers in marketing of Gerbera flower

S. No.	Problems	No. of growers (N=20)	Percentage to total growers	Rank
Marketing				
1	Heavy commission charges	18	90	II
2	Displeasure express by the growers because of very low price realize in winter season	19	95	I
3	High cost of transportation	5	25	V
4	Delay in payment to farmer	12	60	IV
5	Non-availability of precooling and cold storage facilities	13	65	III

Conclusions

Gerbera is the most important crop grown in Nagpur district viz. Kalmeshwar, Saoner and Nagpur (Rural) tahsils are found to be major gerbera cultivation area under polyhouse.

The total quantity sold by 20 growers were 33882th bundle of flowers. The total marketing cost was Rs. 6.01 per bundle of 10 flowers and total margin received by commission agent and retailer was Rs.72.35. The net price received by producer was Rs. 23.00 and the selling price of retailer was Rs. 101.36 per bundle. The marketing efficiency in channel operated in selected market for study was calculated to 15.86.

In Marketing problems, displeasure express by the growers because of very low price realize in winter season was expressed by 19 (95.00 per cent) growers and followed Heavy commission charges was expressed by 18 (90.00 per cent) growers.

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