

# Original Research Article

Formatted: Numbering: Continuous

**Title**: ~~To Study~~ Marketing of flowers ~~cultivation~~ cultivation under polyhouses in Chittor district of Andhra Pradesh

## **Abstract:**

### **Comment [K1]: Abstract:**

-I humbly suggest that the authors reduce the wording for the abstract to fall within the threshold of 150-250 words.

-The abstract should have a concluding sentence which states the significance or contribution of this study to existing body of knowledge and stakeholders briefly.

The flower industry is emerging as a blooming business not only in India, but in other countries as well. Floriculture denotes cultivation of flowers, developing new varieties of commercial value, sale of flowers as raw commodities, processing, distribution, etc. for the local and international market. This paper attempted to understand the ~~to analyse~~ the different marketing channels of flower cultivation under polyhouse in Chittor district of Andhra Pradesh, as the demand for flowers in this area is also increasing at a faster rate with the development of new urban/semi-urban areas and rise in the standard of living of people with the corporate people making their entry to these areas. This study was based on primary data and interviewed with 30 flower growers and seller in Chittor district. Channel I: Farmer → Wholesaler → Trader → Retailer → Consumer. With regard to marigold in channel – I, the net share of the producer in the consumer's rupee is 40 per cent. The price spread for marigold is Rs.65 and marketing efficiency is 0.66. In case of chrysanthemum the net share of the producer in the consumer's rupee is 48 per cent. The marketing efficiency for chrysanthemum is 0.90 in channel – I. Channel - II: Farmer → Wholesaler → Retailer → Consumer. With regard to marigold in channel – II, the net share of the producer in the consumer's rupee is 45 per cent. The price received by the farmer is Rs.43 per kg of the produce from the wholesaler and the wholesaler is selling at a price of Rs.64 per kg to the retailer. The final purchase price of the consumer is Rs.96. The price spread for marigold is Rs.43 and marketing efficiency is 0.81. In the case of chrysanthemum, the net share of the producer in the consumer's rupee is 51 per cent. The marketing efficiency for chrysanthemum is 1.05 in channel – II. Channel-III: Farmer → Wholesaler → Consumer. The producer's share in the consumer's rupee is 55per cent for marigold in channel – III. The price spread for marigold is Rs.35 and marketing efficiency is 1.22. In case of chrysanthemum the net share of the producer in the consumer's rupee is 64 per cent. The marketing efficiency

32 for chrysanthemum is 1.76 in channel – III. Channel - III is having the highest  
33 efficiency among all the channels but mostly used channel is channel – II.

34 **Key words:** Producers Share, Price Spread, Marketing Efficiency.

35

## 36 **1. Introduction:**

37 Floriculture was recognized as a sunrise industry by the government of India  
38 and gave it 100 per cent export oriented status [1,2]. Floriculture has become a  
39 predominant trade in agriculture due to the steady rise in demand for flowers.  
40 For this reasons, commercial floriculture has emerged as a high-tech operation  
41 under controlled climatic conditions [3-5]. It has become apparent that  
42 commercial floriculture has an excessive potential per unit area compared to  
43 other field crops and is therefore an income generating activity. The  
44 commercial activity of production and marketing of floriculture is also a  
45 source of gainful and quality employment for the majority of people.

## 46 **2. Methodology:**

### 47 **1.1 Cost of marketing**

48 The total cost incurred on marketing, in cash or in kind, by the  
49 producer-seller and by various intermediaries involved in the sale and  
50 purchase of the commodity till the commodity reaches the ultimate consumer  
51 was computed as follows:

$$52 \text{ Cost of Marketing} = C_f + C_{m1} + C_{m2} + \dots + C_{mn} \dots(1)$$

53 Where,

54  $C_f$  = Cost paid by the producer from the time, the produce leaves the  
55 farm till sale.

56  $C_{mn}$  = Cost incurred by the nth middleman in the process of buying and  
57 selling the product

### 58 **1.2 Producer's share in consumer's rupee**

#### **Comment [K2]: Introduction:**

-For academic or scientific papers, this introduction is unacceptable.

-Authors should have at least 4-6 paragraphs which highlights the definition of concepts like floriculture and other terms or marketing channels, research progress or gaps identified in other studies which is currently driving the current study's objectives, theories or ecological concepts which underlie this study, significance or importance of the study and clearly stating the study's main objectives or what the study seeks/attempts to address.

#### **Comment [K3]: Methodology:**

-Any description and justification of the study area? Why was that particular district selected for this study?

-Authors need to number the equations in an orderly manner. I suggest authors use the equation insert tab to enter each equation.

-Authors failed to state clearly the research strategy, sampling size, methodology and probabilistic sampling means of generating information from the target population.

-How did authors arrive at the 30-sampling size?

-How representative is this 30 or sampling size in drawing general conclusions for this study?

-What technique was used in engaging them-random sampling, convenient, purposive, snowball and so on. Selection technique needs to be stated and justified accordingly.

59 It is the price received by the producer as a percentage ~~in~~ of the  
60 consumer's price.

$$61 \text{ Producers share in consumer rupee} = \frac{\text{Price received by the farmer}}{\text{Price paid by the customer}} \times 100 \dots (2)$$

### 62 1.3 Analysis of price spread under different channels:

63 Price spread is the difference between the price paid by the consumer  
64 and the price received by the producer.

$$65 \text{ Price Spread} = \text{Price paid by the consumer } (p_c) - \text{Price received by the Farmer } (P_f) \\ 66 \dots (3)$$

67 Where,

68 P<sub>p</sub> -Price paid by the consumer

69 P<sub>f</sub>-Price received by the farmer

### 70 1.4 Marketing Efficiency

71 Marketing efficiency is calculated to most efficient marketing system  
72 which delivers the goods to the consumer at a lowest cost.

73 Sheperd's formula was used for calculating marketing efficiency.

$$74 \text{ M.E} = \left[ \frac{V}{I} \right] - 1 \dots (4)$$

75 where,

76 M.E=Index of marketing efficiency

77 V-Volume of produce sold

78 I= Total marketing costs and margins

79 Acharya's method formula was used for calculating marketing efficiency.

$$80 \text{ M.E} = \frac{FP}{(MC+MM)} \dots (5)$$

81 M.E=Index of marketing efficiency

82 FP= Price received by the farmer

83 MC= Total marketing cost

84 MM=Net marketing margin

85 Floriculture was recognized as a sunrise industry by the government of

### 86 3. Results :

#### 87 **3.1 EFFICIENCY OF MARKETING CHANNELS FOR MARIGOLD** 88 **AND CHRYSANTHEMUM IN THE STUDY AREA**

##### 89 **3.1.1 Three Marketing channels identified for flowers in the study area**

90 Marketing channel refers to the way through which the produce moves  
91 from the producer level to the ultimate consumers. It involves various trade  
92 practices and various intermediaries who facilitate the flow of goods and  
93 services from the point of production to the point of consumption. The  
94 channels adopted depends on various factors like location of the farm,  
95 distance from the markets, number of intermediaries and their availability and  
96 consumption pattern. Three marketing channels were identified in flowers  
97 marketing in the study area.

98 Channel – I: Farmer → Wholesaler → Trader → Retailer → Consumer

99 Channel II: Farmer → Wholesaler → Retailer → Consumer

100 Channel III: Farmer → Wholesaler → Consumer

101

#### **Comment [K4]: Results and discussion:**

-Check the numbering order for this section. 3.1? or the 1.1 means it is part of the introduction? Authors are advised to check and effect the needed corrections accordingly.

-I did not see any thorough or tentative discussion where the results of this study were compared to existing studies or literature.

-Does the current study agree or disagree with existing studies? What other factors or policies influence or drive the scope of this study?

102 **3.1.2 Price spread for flowers in channel I is given in table 1.**

103 Marketing costs, margins and price spread in channel – I

104 The channel I comprises of farmer - wholesaler – trader– retailer -  
 105 consumer. With regard to marigold the wholesalers s are buying a Kg of  
 106 produce from the farmer at a cost of Rs. 43 and selling to the traders at a  
 107 price of Rs.58 with a margin of Rs.8 after deducting their expenses. Traders  
 108 are selling at a price of Rs. 81 with a margin of Rs.10 to the retailers who in  
 109 turn are selling to the consumers at a price of Rs. 108 with a margin of Rs.15.

110 In case of chrysanthemum the wholesalers are buying a Kg of produce  
 111 from the farmer at a cost of Rs.76 and selling to the traders at a price of Rs.95  
 112 with a margin of Rs.12 after deducting their expenses. Traders are selling at a  
 113 price of Rs.123 with a margin of Rs.15 to the retailers who in turn are selling  
 114 to the consumers at a price of Rs. 160 with a margin of Rs.25.

115 **Table 1. Marketing Costs, Margins And Price Spreads In Channel – I**  
 116 **(Farmer– Wholesaler – Trader - Retailer – Consumer) (Rs/Kg)**

S.No.	Particulars	Marigold	Chrysanthemum
1.	Farmers selling price/ Wholesalers purchase price	43.00 (39.9 )	76.00 ( 47.5)
2	<b>Costs incurred by wholesaler</b>		
a	Labour charges	2.00 (1.85)	2.00 (1.25)
b	Transport charges	1.00 (0.92)	1.00 (0.6)
c	Storage	1.00 (0.92)	1.00 (0.6)
d	Shop establishment charges	2.00 (1.85)	2.00 (1.25)
e	Damage and miscellaneous	1.00 (0.92)	1.00 (0.6)
3	Wholesalers margin	8.00 (7.4)	12.00 (7.5)
4	Wholesalers selling price/ Traders purchase price	58.00	95.00
5	<b>Costs incurred by Trader</b>		

Formatted: Space Before: 0.2 line, After: 0.2 line

Formatted: Space Before: 0.2 line, After: 0.2 line

Formatted: Space Before: 0.2 line, After: 0.2 line

Formatted: Space Before: 0.2 line, After: 0.2 line

Formatted: Space Before: 0.2 line, After: 0.2 line

Formatted: Space Before: 0.2 line, After: 0.2 line

Formatted: Space Before: 0.2 line, After: 0.2 line

Formatted: Space Before: 0.2 line, After: 0.2 line

Formatted: Space Before: 0.2 line, After: 0.2 line

Formatted: Space Before: 0.2 line, After: 0.2 line

Formatted: Space Before: 0.2 line, After: 0.2 line

Formatted: Space Before: 0.2 line, After: 0.2 line

Formatted: Space Before: 0.2 line, After: 0.2 line

Formatted: Space Before: 0.2 line, After: 0.2 line

a	Labour charges	4.00 (3.7)	4.00 (2.5)
b	Transport charges	3.00 (2.77)	3.00 (1.87)
c	Storage	2.00 (1.85)	2.00 (1.25)
d	Shop establishment charges	2.00 (1.85)	2.00 (1.25)
e	Damage and miscellaneous	2.00 (1.85)	2.00 (1.25)
6	Traders margin	10.00 (9.25)	15.00 (9.3)
7	Traders selling price/retailers purchase price	81.00	123.00
8	<b>Costs incurred by retailer</b>		
a	Labour charges	3.00 (2.77)	3.00 (1.87)
b	Storage	1.50 (1.3)	1.50 (0.93)
c	Shop establishment charges	2.50 (2.31)	2.50 (1.5)
d	Transport charges	3.00 (2.7)	3.00 (1.8)
e	Damage and miscellaneous	2.00 (1.85)	2.00 (1.25)
9	Retailers margin	15.00 (13.8)	25.00 (15.7)
10	Retailers selling price/consumers purchase price	108.00 (100)	160.00 (100)
11	<b>Price spread</b>	<b>65.00</b>	<b>84.00</b>

Formatted: Space Before: 0.2 line, After: 0.2 line

Formatted: Space Before: 0.2 line, After: 0.2 line

Formatted: Space Before: 0.2 line, After: 0.2 line

Formatted: Space Before: 0.2 line, After: 0.2 line

Formatted: Space Before: 0.2 line, After: 0.2 line

Formatted: Space Before: 0.2 line, After: 0.2 line

Formatted: Space Before: 0.2 line, After: 0.2 line

Formatted: Space Before: 0.2 line, After: 0.2 line

Formatted: Space Before: 0.2 line, After: 0.2 line

Formatted: Space Before: 0.2 line, After: 0.2 line

Formatted: Space Before: 0.2 line, After: 0.2 line

Formatted: Space Before: 0.2 line, After: 0.2 line

Formatted: Space Before: 0.2 line, After: 0.2 line

Formatted: Space Before: 0.2 line, After: 0.2 line

Formatted: Space Before: 0.2 line, After: 0.2 line

Formatted: Space Before: 0.2 line, After: 0.2 line

Formatted: Space Before: 0.2 line, After: 0.2 line

117

118 The price spread in the channel – I for marigold and chrysanthemum  
119 are Rs.65.00<sub>;</sub> and Rs. 84.00<sub>;</sub> respectively.

### 120 **3.1.3 Marketing costs, margins and price spread in channel – II**

121 Price spread for flowers in channel II is given in table 2. The channel II  
122 comprises of farmer – wholesaler – retailer – consumer. The purchase price of  
123 marigold from the farmers by the wholesalers is Rs.43 and selling price to the

124 retailers is Rs.64 with a margin of Rs.8. Retailers are selling to the  
 125 consumers at a price of Rs.96 with a margin of Rs.20. In the case of  
 126 chrysanthemum, the wholesalers purchasing cost is Rs.76 and selling price to  
 127 the retailers is Rs.101 with a margin of Rs.12. The final price to the  
 128 consumers is Rs.148 giving a margin of Rs. 35 to the retailer.

129

130 **Table 2.—Marketing costs, margins and price spreads in channel – II**  
 131 **(Farmer – Wholesaler – Retailer - Consumer) (Rs/Kg)**

S.No.	Particulars	Marigold	Chrysanthemum
1.	Farmers selling price/ Wholesalers purchase price	43.00 (44.79)	76.00 (51.35)
2.	<b>Costs incurred by wholesaler</b>		
a	Labour charges	3.00 (3.12)	4.00 (2.7)
b	Transport charges	3.50 (3.6)	3.00 (2.02)
c	Storage	2.00 (2.08)	2.00 (1.35)
d	Shop establishment charges	2.00 (2.08)	2.00 (1.35)
e	Damage and miscellaneous	2.50 (2.6)	2.00 (1.35)
3	Wholesalers margin	8.00 (8.33)	12.00 (8.1)
4	Wholesalers selling price/retailers purchase price	64.00	101.00
5	<b>Costs incurred by retailer</b>		
a	Labour charges	3.00 (3.12)	3.00 (2.02)
b	Storage	1.50 (1.56)	1.50 (.01)
c	Shop establishment charges	2.50 (2.6)	2.50 (1.68)
d	Transport charges	2.00 (2.08)	2.00 (1.35)
e	Damage and miscellaneous	3.00 (3.12)	3.00 (2.07)
6	Retailers margin	20.00 (20.83)	35.00 (23.6)
7	Retailers selling price/consumers	96.00	148.00

Formatted: Space After: 0.2 line

Formatted: Space After: 0.2 line

Formatted: Space After: 0.2 line

Formatted: Space After: 0.2 line

Formatted: Space After: 0.2 line

Formatted: Space After: 0.2 line

Formatted: Space After: 0.2 line

Formatted: Space After: 0.2 line

Formatted: Space After: 0.2 line

Formatted: Space After: 0.2 line

Formatted: Space After: 0.2 line

Formatted: Space After: 0.2 line

Formatted: Space After: 0.2 line

Formatted: Space After: 0.2 line

Formatted: Space After: 0.2 line

Formatted: Space After: 0.2 line

Formatted: Space After: 0.2 line

Formatted: Space After: 0.2 line

Formatted: Space After: 0.2 line

	purchase price	(100)	(100)
8	<b>Price spread</b>	<b>43.00</b>	<b>72.00</b>

Formatted: Space After: 0.2 line

132

133 The price spread in the channel – II for marigold and chrysanthemum  
134 are Rs.43.00, and Rs.72.00 respectively.

135

### 136 1.5 Marketing costs, margins and price spread in channel – III

137 Price spread for flowers in channel III is given in table 3. The channel  
138 III comprises of farmer – wholesaler – consumer. Marigold is bought by the  
139 wholesaler from the farmers at a price of Rs. 43 and selling price to the  
140 consumers is Rs.78 with a margin of Rs. 22. In case of chrysanthemum the  
141 wholesalers are purchasing at a cost of Rs.76 and selling to the consumers at  
142 a price of Rs.119 with a margin of Rs.30.

143

144 **Table 3. Marketing costs, margins and price spreads in channel – III**  
145 **(Farmer – Wholesaler – Consumer) (Rs/Kg)**

S.No.	Particulars	Marigold	Chrysanthemum
1	Farmers selling price/ Wholesalers purchase price	43.00 (55.12)	76.00 (63.8)
2.	<b>Costs incurred by wholesaler</b>		
2.a	Labour charges	3.00 (3.8)	4.00 (3.36)
2.b	Transport charges	4.00 (5.12)	3.00 (2.52)
2.c	Storage	2.00 (2.5)	2.00 (1.68)
2.d	Shop establishment charges	2.00 (2.5)	2.00 (1.68)
2.e	Damage and miscellaneous	2.00 (2.5)	2.00 (1.68)
3	Wholesalers margin	22..00 (28.2)	30.00 (25.21)

Formatted: Space Before: 0.2 line, After: 0.2 line

Formatted: Space Before: 0.2 line, After: 0.2 line

Formatted: Space Before: 0.2 line, After: 0.2 line

Formatted: Space Before: 0.2 line, After: 0.2 line

Formatted: Space Before: 0.2 line, After: 0.2 line

Formatted: Space Before: 0.2 line, After: 0.2 line

Formatted: Space Before: 0.2 line, After: 0.2 line

Formatted: Space Before: 0.2 line, After: 0.2 line

Formatted: Space Before: 0.2 line, After: 0.2 line

4	Wholesalers selling price/ consumers purchase price	78.00 (100)	119.00 (100)
5	<b>Price spread</b>	<b>35.00</b>	<b>43.00</b>

Formatted: Space Before: 0.2 line, After: 0.2 line

Formatted: Space Before: 0.2 line, After: 0.2 line

146

147 The price spread in the channel – III for marigold and  
148 chrysanthemum are Rs.35.00, and Rs. 43.00 respectively.

#### 149 **1.7 Producers share in consumer rupee**

150 Producers share in consumer rupee for the three marketing channels is  
151 shown in the table 4. It can be observed from the table that producers share in  
152 consumers rupee is highest in channel – III followed by channel – II and least  
153 in the channel – I. This is because highest number of intermediaries are  
154 involved in channel – I compared to the other two channels. Channel – III is  
155 having highest producers share in the consumer rupee because of less number  
156 of intermediaries. Most of the farmers use Channel – II. The farmers can  
157 directly link with the retail chains, restaurants etc., to increase their profits. In  
158 the consumer perspective, channel – III is affordable to them as the price paid  
159 by the consumers is lowest in channel – III, compared to other two channels.

160

161 **Table 4. Producers share in consumer rupee among the various**  
162 **channels**

S. No.	Crops	Channel- I ( Percentage)	Channel –II ( Percentage)	Channel- III ( Percentage)
1	Marigold	40	45	55
2	Chrysanthemum	48	51	64

163

164 Bhalsing (2012) studied a geographical study of chrysanthemum  
165 production in Nagar and Parner tahsils of Ahmednagar district, reported that  
166 the producer's share in consumer's rupee was 20.79 per cent.

#### 167 **1.9 Marketing channel efficiency**

168 The efficiency of each channel for flower crops is analyzed by using  
 169 Sheperd's formula and presented in the table 5. Marketing Efficiency Index  
 170 (MEI) represents the effectiveness of a marketing system in which it operates.  
 171 The marketing efficiency for channels I, II and III for marigold is 0.66, 0.81,  
 172 1.22 respectively and for chrysanthemum it is 0.90, 1.05, 1.76 respectively.  
 173 It can be observed from the results that channel – III is having highest  
 174 marketing efficiency among all the three channels for flower crops. This is  
 175 because of the fact that channel – III has least number of intermediaries and  
 176 hence this channel is more efficient than the channel – I and channel – II. The  
 177 channel – I is seen as the least efficient channel because of the lengthier  
 178 marketing channel and multiplicity of margins to the intermediaries.

179 The efficiency of each channel for flower crops is analyzed by using  
 180 Acharya's method and presented in the table 6. Marketing Efficiency Index  
 181 (MEI) represents the effectiveness of a marketing system in which it operates.  
 182 The marketing efficiency for channels I, II and III for marigold is 0.43, 0.60,  
 183 0.75 respectively and for chrysanthemum it is 0.55, 0.63, 1.04 respectively. It  
 184 can be observed from the results that channel – III is having highest marketing  
 185 efficiency among all the three channels for flower crops. This is because of  
 186 the fact that channel – III has least number of intermediaries and hence this  
 187 channel is more efficient than the channel – I and channel – II. The channel –  
 188 I is seen as the least efficient channel because of the lengthier marketing  
 189 channel and multiplicity of margins to the intermediaries.

190

191 **Table 5. Marketing efficiency of flowers in different channels**  
 192 **(Rs/Kg) by using Sheperd's formula**

S.No.	Particulars	Channel – I	Channel – II	Channel – III
1.	Marigold			
	Value of marketing output	108.00	96.00	78.00
	Total marketing cost	65.00	53.00	35.00

	Marketing efficiency	0.66	0.81	1.22
2.	Chrysanthemum			
	Value of marketing output	160.00	148.00	119.00
	Total marketing cost	84.00	72.00	43.00
	Marketing efficiency	0.90	1.05	1.76

193

194 **Table 6. Marketing efficiency of flowers in different channels**  
 195 **(Rs. /Kg) by using Acharya's method**

S.No.	Particulars	Channel – I	Channel – II	Channel – III
1.	Marigold			
	Price received by the farmer (FP)	43.00	43.00	43.00
	Total marketing cost (MC)	65.00	43.00	35.00
	Net marketing margin (MN)	33.00	28.00	22.00
	Marketing efficiency	0.43	0.60	0.75
2.	Chrysanthemum			
	Price received by the farmer (FP)	76.00	76.00	76.00
	Total marketing cost (MC)	84.00	72.00	43.00
	Net marketing margin (MN)	52.00	47.00	30.00
	Marketing efficiency	0.55	0.63	1.04

196

#### 197 **4. SUMMARY AND CONCLUSIONS**

##### 198 **Marketing channels**

199 Three channels were identified in the marketing of flowers and are they are

200 Channel I: Farmer → Trader → Wholesaler → Retailer → Consumer

Formatted: Space Before: 0.4 line, After: 0.4 line

Formatted: Space Before: 0.4 line, After: 0.4 line

Formatted: Space Before: 0.4 line, After: 0.4 line

Formatted: Space Before: 0.4 line, After: 0.4 line

Formatted: Space Before: 0.4 line, After: 0.4 line

Formatted: Space Before: 0.4 line, After: 0.4 line

Formatted: Space Before: 0.4 line, After: 0.4 line

Formatted: Space Before: 0.4 line, After: 0.4 line

Formatted: Space Before: 0.4 line, After: 0.4 line

Formatted: Space Before: 0.4 line, After: 0.4 line

Formatted: Space Before: 0.4 line, After: 0.4 line

##### Comment [K5]: Conclusions:

- The conclusion should not repeat the results stated in the results section directly. It should summarize them briefly.
- The limitations of this study must be integrated briefly in the conclusion section.
- Any possible areas or gaps that could guide or drive future studies/researchers?
- The relevance of findings could also be integrated briefly in the concluding section.

201 Channel II: Farmer → Wholesaler → Retailer → Consumer

202 Channel III: Farmer → Wholesaler → Consumer

203 **Price spread of flowers**

204 Channel I: Farmer → Wholesaler → Trader → Retailer → Consumer

205 With regard to marigold in channel – I, the net share of the producer in  
206 the consumer's rupee is 40 per cent. The price received by the farmer is Rs.43  
207 per kg of the produce from the wholesaler and the wholesaler is selling at a  
208 price of Rs.58 per kg to the trader. The trader selling price to the retailer is  
209 Rs.81 per kg which is sold at a price of Rs. 108 to the consumer. The price  
210 spread for marigold is Rs.65 and marketing efficiency is 0.66. In case of  
211 chrysanthemum the net share of the producer in the consumer's rupee is 48  
212 per cent. The price received by the farmer is Rs.76 per kg of the produce from  
213 the wholesaler and the wholesaler is selling at a price of Rs.95 to the trader.  
214 The trader selling price to the retailer is Rs 123 per kg which is sold at a price  
215 of Rs.160 to the consumer and the price spread is Rs.84. The marketing  
216 efficiency for chrysanthemum is 0.90 in channel – I.

217 Channel - II: Farmer → Wholesaler → Retailer → Consumer

218 With regard to marigold in channel – II, the net share of the producer in  
219 the consumer's rupee is 45 per cent. The price received by the farmer is Rs.43  
220 per kg of the produce from the wholesaler and the wholesaler is selling at a  
221 price of Rs.64 per kg to the retailer. The final purchase price of the consumer  
222 is Rs.96. The price spread for marigold is Rs.43 and marketing efficiency is  
223 0.81. In case of chrysanthemum the net share of the producer in the  
224 consumer's rupee is 51 per cent. The price received by the farmer is Rs.76 per  
225 kg of the produce from the wholesaler. The wholesalers selling price to the  
226 retailer is Rs.101 per kg which is sold at a price of Rs. 148 to the consumer  
227 and the price spread is Rs.72. The marketing efficiency for chrysanthemum is  
228 1.05 in channel – II.

229 Channel-III: Farmer → Wholesaler → Consumer

230 The producer's share in the consumer's rupee is 55 per cent for marigold in  
231 channel – III. The price received by the farmer is Rs.43 per kg of the produce  
232 from the wholesaler and the wholesaler is selling at a price of Rs.78 per kg to  
233 the consumer. The price spread for marigold is Rs.35 and marketing  
234 efficiency is 1.22. In case of chrysanthemum the net share of the producer in  
235 the consumer's rupee is 64 per cent. The producer is selling at a price of Rs.76  
236 per kg to the wholesaler. The consumer is purchasing at a cost of Rs.119 per  
237 kg from the wholesaler and the price spread is Rs.43. The marketing  
238 efficiency for chrysanthemum is 1.76 in channel – III.

239 Channel - III is having the highest efficiency among all the channels but  
240 mostly used channel is channel – II.

241

## 242 References

- 243 1. Sarmah D, Kolukunde S, Mandal T. Evaluation of gerbera varieties for growth and flowering  
244 under polyhouse in the plains of west Bengal. International journal of scientific research.  
245 2014;3(12):135-6.
- 246 2. Maitra S, Shankar T, Palai JB, Sairam M, Pal A, Gaikwad DJ. Cultivation of Gerbera in  
247 Polyhouse. In Protected Cultivation and Smart Agriculture, Protected 2020 (pp. 219-226).  
248 New Delhi Publishers.
- 249 3. Mishra H, Mohanty CR, Rout MS. Flowers Cultivation. International Journal of Modern  
250 Agriculture. 2020 Sep 30;9(3):631-7.
- 251 4. Maitra S, Shankar T, Sairam M, Pine S. Evaluation of gerbera (*Gerbera jamesonii* L.)  
252 cultivars for growth, yield and flower quality under protected cultivation. Indian Journal of  
253 Natural Sciences. 2020;10(60):20271-6.
- 254 5. Barreto MS, Jagtap KB. Assessment of substrates for economical production of gerbera  
255 (*Gerbera jamesonii* Bolus ex Hooker F.) flowers under protected cultivation. Journal of  
256 Ornamental Horticulture. 2006;9(2):136-8.

257

258

259

260

261

262