D. M. Kavitha et al. International Journal of Recent Research Aspects ISSN: 2349-7688, Special Issue: Conscientious Computing Technologies, April 2018, pp. 383-386

An Analytical Study on Cost, Returns and Constraints in Flower Cultivation in Kanniyakumari District

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Abstract- **India is predominantly an agricultural country. Floriculture is a branch of agriculture. Agricultural marketing in India is basically in the clutches of middlemen and the peasants are in their octopus grip. Marketing of flowers posses more problems compared to other agricultural commodities as they have a high degree of perishability, steady decline in price, interference many number of middlemen and are grown mostly by the small and marginal farmers. Further, the flower growers are affected by the problems like time of sales, price fluctuation, non-availability of fertile seedling, high wage rate, non-availability of labourers, high transport cost, high commission and malpractice by the middlemen.**

In the present study cost and returns structures of marginal and small growers cultivating flowers are analyzed. The cost has been categorized into preparatory cultivation, manure and manuring, seed and sowing, irrigation, weeding and earthling up, plant protection and harvesting. The per acre average cost and returns structure of marginal and small farmers cultivating Tuberose flowers, Nerium and Jasmine flowers are tabulated with the help of tables.

Key words: Marginal Farmers, Small Farmers, Middle Men.

INTRODUCTION:

India is predominantly an agricultural country. Nearly forty per cent of the country's national income is derived from agriculture and its allied activities.1 In India, agriculture is the largest sector of economic activity. It provides not only food and raw-materials but also employment to very large proportion of the population. Agricultural marketing in India is basically in the clutches of middlemen and the peasants are in their octopus grip. The cultivator of flowers in particular are at the mercy of the middlemen more than the growers of other crops because of high perishable nature of the produce coupled with the imperfect market structure dominated by the unscrupulous intermediaries. Although Indian society is a mixture of castes and creeds, there is unity in diversity in using the flowers. Hindus, Christians, Muslims and others all alike use flowers in one form or other on various occasions. Women of all age groups wear flowers in their hair put-ups. Floriculture is an intensive type of agriculture and the income per unit area from floriculture is much higher than any other branch of agriculture.

STATEMENT OF THE PROBLEM:

Mere increase in agricultural production is neither the goal of the planners nor the producers. The process of production ends only with final consumption and its marketing which provides a link between production and consumption. Flower is marketed through agents in markets. Marketing of flowers posses more problems compared to other agricultural commodities as they have a high degree of perishability, steady decline in price, interference many number of middlemen and are grown mostly by the small and marginal farmers. Further, the flower growers are affected by the problems like time of sales, price fluctuation, non-availability of fertile seedling, high wage rate, non-availability of labourers, high transport cost, high commission and malpractice by the middlemen. In addition to that inadequate technical know-how and Government's apathetic attitude have compounded the problems of cultivation and marketing of this crop. Farmers are thus facing a number of difficulties in the disposal of the produce. Flowers require much preparation to the market involving special skill and flowers have to undergo form utilities before they reach the consumers.

OBJECTIVES OF THE STUDY:

1. To identify the cost spend by farmers in flower cultivation.
2. To examine the returns received by the farmers in flower cultivation.
3. To analyse the constrains faced by the farmers in the study area.

METHDOLOGY:

The present study is confined to Kanniyakumari district of Tamil Nadu. Multistage random sampling technique has been adopted for the study, Both primary and secondary data are used. Collected data are tabulated to make it suitable for further statistical analysis. Out of 450 sample cultivators, 150 cultivators are under the category of Tuberose, Nerium and Jasmine flowers respectively. In order to achieve the objectives of the study, sample cultivators were stratified into two categories namely marginal and small cultivators based on area under flowers. . The farmers less than 2 acres were grouped on marginal size and farmers of more than two acres and less than 5 acres are grouped as small size.

COST AND RETURNS STRUCTURE:

In this study, the cost and returns structures of marginal and small growers cultivating flowers are studied. For this purpose, the collected data has been analysed with reference to cost and returns structure including various cost components used in the study area. . In the present study, cost has been categorised into preparatory cultivation, manure and manuring, seed and sowing, irrigation, weeding and earthling up, plant protection and harvesting.

Cost and Returns Structure of Tuberose Flowers

The per acre average cost and returns structure of marginal and small farmers cultivating Tuberose flowers, are furnished in table - 1.

TABLE - 1

PER ACRE AVERAGE COST AND RETURNS STRUCTURE OF MARGINAL AND SMALL FARMERS CULTIVATING TUBEROSE FLOWERS

(in Rs.)

SI. No.	Cost Component	Marginal Farmers	Small Farmers	Total
1.	Preparatory cultivation	872.36 (3.97)	1221.12 (5.13)	1004.89 (4.44)
2.	Manures and Manuring	7863.12 (35.81)	8012.61 (33.67)	7919.93 (34.95)
3.	Seeds and sowing	964.32 (4.39)	1112.16 (4.67)	1020.50 (4.50)
4.	Irrigation	968.16 (4.41)	1016.13 (4.27)	986.39 (4.35)
5.	Weeding and Earthling up	1363.12 (6.21)	1469.64 (6.18)	1403.60 (6.19)
6.	Plant protection	966.12 (4.40)	993.72 (4.18)	976.61 (4.31)
7.	Harvesting	8963.12 (40.82)	9972.16 (41.90)	9346.56 (41.25)
	Total Cost (in Rs.)	21960.32 (100.00)	23797.54 (100.00)	22658.48 (100.00)
	Yield of flowers (kg.)	1835.48	2031.89	1910.12
	Gross Returns (Rs.)	43592.58	47769.70	45179.24
	Net Returns (Rs.)	21632.26	23972.16	22520.76

Source : Survey data

The above table shows that the marginal farmers produced 1835.48 kgs of Tuberose variety of flowers and earned Rs.43592.58 per acre while their net returns per acre was Rs.21632.26. It has been observed in the cost analysis that the per acre total cost, that is operational cost of cultivation for marginal farmers, works out to Rs.21960.32, whereas it is Rs.23797.54 for small farmers.

Cost And Returns Structure of Nerium Flowers:

The per acre cost and returns structure of marginal and small farmers cultivating Nerium are given in Table - 2

TABLE - 2

PER ACRE AVERAGE COST AND RETURNS STRUCTURE OF MARGINAL AND SMALL FARMERS CULTIVATING NERIUM FLOWERS

(in Rs.)

SI. No.	Cost Component	Marginal Farmers	Small Farmers	Total
1.	Preparatory cultivation	962.16 (4.41)	996.16 (4.23)	973.04 (4.35)
2.	Manures and Manuring	7976.48 (36.57)	8216.12 (34.88)	8053.17 (36.00)
3.	Seeds and sowing	896.12 (4.11)	1013.72 (4.30)	933.75 (4.17)
4.	Irrigation	816.22 (3.74)	914.32 (3.88)	847.61 (3.79)
5.	Weeding and Earthling up	1411.63 (6.48)	1516.32 (6.44)	1445.13 (6.46)

6.	Plant protection	886.36 (4.06)	981.37 (4.17)	916.76 (4.10)
7.	Harvesting	8863.12 (40.63)	9916.32 (42.10)	9200.14 (41.13)
	Total Cost (in Rs.)	21812.09 (100.00)	23554.33 (100.00)	22369.60 (100.00)
	Yield of flowers (kg.)	2077.25	2214.56	2121.19
	Gross Returns (Rs.)	45424.45	48676.03	46464.96
	Net Returns (Rs.)	23612.36	25121.73	24095.36

Source : Survey data.

The cost analysis has observed that the per acre total cost, that is operational cost of cultivation for marginal farmers, works out to Rs.21812.09, whereas it is Rs. 23554.33 for small farmers. It is observed that total cost incurred is found higher in the case of small farmer compared to marginal farmers.

Cost and Returns Structure Of Jasmine Flowers:

The per acre cost and return structure of marginal and small farmers cultivating Jasmine are presented in Table – 3.

TABLE - 3
PER ACRE AVERAGE COST AND RETURNS STRUCTURE OF MARGINAL AND SMALL FARMERS CULTIVATING JASMINE FLOWERS

(in Rs.)

Sl. No.	**Cost Component**	**Marginal Farmers**	**Small Farmers**	**Total**
1.	Preparatory cultivation	971.16 (4.25)	1012.32 (4.13)	985.98 (4.20)
2.	Manures and Manuring	7781.28 (34.05)	8116.48 (33.08)	7901.95 (33.69)
3.	Seeds and sowing	975.72 (4.27)	1016.72 (4.14)	990.48 (4.22)
4.	Irrigation	1016.82 (4.45)	1121.66 (4.57)	1054.56 (4.50)
5.	Weeding and Earthling up	1372.16 (6.0)	1476.18 (6.02)	1409.61 (6.01)
6.	Plant protection	978.76 (4.30)	1078.86 (4.40)	1014.80 (4.33)
7.	Harvesting	9748.30 (42.67)	10711.38 (43.66)	10095.01 (43.05)
	Total Cost (in Rs.)	22844.2 (100.00)	24533.60 (100.00)	23452.39 (100.00)
	Yield of flowers (kg.)	1774.89	1896.10	1840.79
	Gross Returns (Rs.)	44372.36	47652.36	46203.93
	Net Returns (Rs.)	21528.16	23118.76	22751.54

Source : Survey data.

It is inferred from Table 4.9 that in the case of farmers cultivating Jasmine flowers, the marginal farmers have produced 1774.89 kgs of flower and have earned Rs.44372.36 while their net returns is Rs.21528.16.

The cost analysis shows that the per acre total cost, that is operational cost of cultivation for marginal farmers, works out to Rs.22844.2 whereas it is Rs.24533.60 for small farmers. It is observed that total cost incurred is found higher in the case of small farmers compared to marginal farmers.

CONSTRAINTS IN FLOWER CULTIVATION:

It is found that invariably all farmers have cultivation problems like seedlings problem, non availability of labourers, high wages, severity of diseases, lack of finance, lack of technology, water scarcity, poor quality of fertilizer and the cost of other inputs.

Flower Cultivation Problems: Ranking Analysis :

To identify the relative importance of the problems in flower cultivation, it is decided to use the scaling of ranks with the help of Scale Conversion Table and Garrett Ranking Technique. Nine problems relating to flower cultivation are identified and given in the final interview schedule. All the 450 sample farmers are called to assign rank to all these problems in order to magnitude. Garrett ranking technique is also carried out to further probe the impact of problems faced by the flower growers. Finding as per this technique is given in Table - 4

TABLE - 4
MEAN SCORE VALUE AND RANK OF CONSTRAINTS FACED BY FLOWER GROWERS – GARRETT RANKING TECHNIQUE

Sl. No.	Problems	Mean Score Value	Rank
1.	Labour shortage	78.36	I
2.	Seedlings problem	64.31	II
3.	Higher wage	59.63	III
4.	Severity of diseases	44.36	IV
5.	High price of inputs	39.72	V
6.	Poor quality of fertilizer and pesticides	30.16	VI
7.	Water scarcity	26.32	VII
8.	Lack of technology	24.78	VIII
9.	Lack of finance	21.38	IX

Source : Computed data

The above table - 4 shows, that the farmers felt labour shortage as the major problem, because this problem is indicated by higher mean score of 78.36. This is followed by seedlings problem (mean score 64.31. On the contrary, a study made by Ajjan (1999) occurrence of pests and diseases are the major problems in flower cultivation.

On the basis of outcome of the ranking analysis, it can be inferred that the sample farmers have suffered very much with seedlings problems and labour availability. Hence, notwithstanding ranking analysis of these constraints, an attempt is made to analyse further the labour shortage and seedlings problem in flower cultivation.

FINDINGS:

1. Regarding the cost and return structure, the analysis revealed that the small growers have received higher returns in all the three variety of flowers.

2. It is also observed from the analysis that the expenditure on factor inputs namely preparatory cultivation, manures and manuring, irrigation, weeding and earthling up and plant protection exhibited the same pattern for three category of flowers.

3. The Garrett's ranking technique was applied to identify the constraints in flower cultivation and it was found labour shortage, seedling problems and high wages were the major hurdles for both marginal and small growers in the study area.

SUGGESTIONS:

1. The efforts should be made to disseminate modern methods of cultivation to increase the yield.

2. The newly introduced varieties, crop diseases and technological developments should be informed to the flower growers at right time.

3. The major factors affecting flower cultivation, as revealed by the study are labour shortage, seedling problem and higher wage. It is suggested that the Government should take necessary steps to implement mechanisation in flower cultivation to reduce labour shortage. For the supply of quality seeds, the Government should make arrangements to avail quality of flower seeds through Department of Agriculture.

4. The marketing cost constitutes a major portion of the consumers' price. The cultivators should be advised and assisted to develop direct link between the retailers, wholesalers and commission agents.

CONCLUSION:

From the foregoing analysis, labour shortage was also found severe in the study area which limits to cultivate flowers. Further marketing system is not efficient as evident from high marketing cost.

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