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Research

Cost Benefit Analysis of Jasmine Flowers in Vellampalli Village

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Abstract

Jasmine, the state flower of Andhra Pradesh state is locally called as Malli. It is delicate and elegant with blissful fragrance. Cost-benefit analysis is the important tool to evaluate the economic performance of any crop. Hence, the study has been taken up to examine costs and benefit in jasmine cultivation in Vellampalli village located in Maddipadu mandal of Prakasam district in Andhra Pradesh, India. This village is purposively selected because of its familiarity. Primary data is collected from the cultivator of jasmine flowers with the help of a structured questionnaire for analysis. Simple statistical tools such as ratios, percentages are employed in the analysis. Direct economic costs and direct economic benefits are taken in the study. The study reveals that benefit-cost ratio is equal to 2. It is also creating self-employment and wage employment. The cultivation of jasmine flowers is beneficial to the cultivator and to the society. It is a feasible activity. It solves to some extent the problem of jobless growth in rural areas. It contributes to rural development in India. The government may encourage the cultivation of jasmine flowers in India.

Key words: Jasmine; benefit-cost ratio; cultivation

Introduction

Jasmine is one of the most important fragrant flowers cultivated in India. The flower is used for various purposes like making garlands, bouquet, decorating hair of women, religious offerings etc. Its exquisite fragrance soothes and refreshes. It is also used in the production of perfumes, hair oils, soaps and cosmetics. The species cultivated in Vellampalli (Jasminum sambac) is sold as fresh flowers, not used for concrete extraction. Jasminum sambac belongs to the family oleaceae. They are erect, shrubby flowering plants. Flowers are white and fragrant. Jasmine can be propagated by cuttings, layering and suckers.

Andhra Pradesh is one of the prominent areas under jasmine cultivation. Very few studies have been done on cost and benefits of jasmine cultivation in India in recent times [1-4]. Hence, present study is conducted to examine the cost and

benefits in cultivation of jasmine flowers particularly in Vellampalli village of Prakasam district.

Methodology adopted

Vellampalli village is located in Maddipadu mandal of Prakasam district, Andhra Pradesh, India. It is by the side of grand trunk road from Chennai to Kolkata. Vellampalli is basically an agricultural village. It is known for fruit and flower gardens. This village is purposively selected for the study because of its familiarity.

The name of the sample farmer is Sri Kondipoyina Edukondalu. There are two gardens of jasmine flowers. The other member has not responded to our questionnaire. Therefore the study is confined to one farmer of cultivating jasmine flowers in vellampalli village. The data is collected with the help of structured questionnaire. Simple statistical tools such as tables, ratios are employed. Direct economic costs and direct economic benefits are taken for analysis in this study. The size of the land is presented in this study in acres. One hectare is equal to 2.47 acres.

The Concept of Cost-Benefit Analysis

Cost-Benefit analysis involves systematic, objective and comprehensive appraisal of development programmes for individual commodities and projects. It is also called Benefit-Cost analysis or implies B-C analysis.

The main steps involved in the technique of Benefit-Cost analysis are:

1. Identification and measurements of costs

2. Identification and measurements of benefits

3. Translation of costs and benefits to a common denomination

4. Computation of Benefit-Cost ratio or B/C ratio

The benefits and costs of a programme may well be elaborated under 8 schedules.

1. Direct economic benefits

2. Indirect economic benefits

3. Direct social benefits

4. Indirect social benefits

5. Direct economic costs

6. Indirect economic costs

7. Direct social costs

8. Indirect social costs

The basic principle behind the concept of B-C analysis:

If B/C = 1, the project is marginal. It is just covering its costs. If B/C is <1, the benefit is less than the cost and the project cannot be undertaken. If B/C >1, the benefit is more than cost and it is beneficial to undertake the project. The higher the B/C ratio, the higher will be the priority attached to the project.

Results

Results are presented in the form of tables.Table-1 shows the socio-economic characteristics of farmer of Jasmine flowers.Jasmine is perishable and seasonal flower. White soil is used for cultivation of jasmine flowers (2 acres). The share of land used for jasmine flowers in total land owned by the farmer is 20 percent. The age of the jasmine garden is 5 years. 70 cuttings are employed per acre. The cuttings were collected from Rajahmundry. Jasminum sambac is cultivated.

The flowering season is January-July. Irrigation is with bore well. Production cost details are presented in table-2. Plastic covers are used in packing. Lorries, trucks, autos are used to transport from production point to market areas. The details relating to benefits are presented in table-3. Table-4 reveals the particulars relating to B-C ratio. Since B/C ratio is 2.1(i.e >1), the cultivation of Jasmine flowers is beneficial to the farmers. It is generating self and wage employment which is a contribution to the society.

1.	Name	K.Edukondalu
2.	Social category	LBC
3.	Main occupation	Agriculture
4.	Family size	5
5.	Ration card	White
6.	Land details	Own, 10acres
7.	Age	50
8.	sex	Male
9.	Education	7^{th} class
10.	Religion	Hindu
11.	Earning members (self-employed)	2

Source: Field data

Table 1: Socio-economic characteristics of farmer of jasmine garden in Vellampalli village

S.No		Amount in Rs.	Share in total cost%
1	Initial investment per acre for 12 years	120000	80.34
2	Initial investment per acre per year	10000	6.69
3	Labour cost per acre	125000	83.69
4	Fertilizers per acre	10000	6.69
5	Irrigation charges per acre	360	0.24
6	Miscellaneous expenses per acre	4000	2.69
7	Total expenses per acre per year	149360	100.0

Source: Field data

Table 2: Production cost of jasmine flowers in Vellampalli village per year.

1.	Gestation period	One year
2.	Age of the Jasmine garden	5 years
3.	Market area	Ongole, Sullurpet, Chennai
4.	Sale status	middlemen
5.	Nature of sale	Credit basis
6.	Period between sale and cash received	1 week
7.	Difference in benefit	Increases every year from 2 year up to 5 years
8.	Life of the garden	12 years
9.	Benefit per year per acre	Rs.315000
10.	Impact of natural calamities	No noticeable impact
11.	Employment generation per acre	Self-employment for 2 persons per day per 12 months
		Wage employment for 100 persons for 3months
12.	Beneficiary of subsidy	Electricity subsidy
13.	Supervision of horticulture department	No supervision
14	Difference in wage rates	Male :Rs.300/- per day Female:Rs:200/- per day

Source: Field data

Table 3: Benefit of Jasmine flowers in Vellampalli village per year

1.	Benefit per year per acre	Rs.315000
2.	Cost per year per acre	Rs.149360
3.	Benefit-cost ratio	2.1:1
4.	Acceptability of jasmine gardens	Since B/C>1, jasmine gardens may be encouraged

Source: Field data

Table 4: Benefit- cot ratio for Jasmine flowers in Vellampalli village

Conclusion

Cultivation of jasmine flowers creates self-employment and wage employment especially for the rural poor. It solves the problem of jobless growth to some extent in rural areas. It contributes to rural development.

There is an increase in population in India. Increase in population leads to increase in celebrations (birthday, marriages). It increases demand to flowers. Faith in God is increasing in India. It encourages performance of pujas which also increases the demand for flowers.

Since, B/C ratio is >1, it contributes for agricultural development and in turn to rural development. It increases the income of rural people.

The cultivation of jasmine flowers may be encouraged by the government with the provision of subsidies, supervision, guidance and training and incentives. Bank loans may be arranged to jasmine flower cultivators.

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