



THE CONTRIBUTION OF JASMINE CULTIVATION TO RURAL ECONOMIC GROWTH AND DEVELOPMENT IN SHIRVA, UDUPI DISTRICT—A CASE STUDY

Rakshitha S

Research Scholar, College of Management & Commerce, Srinivas University, Mangalore, India.

Dr Prabhakar Neermarga*

Research Professor, College of Management & Commerce, Srinivas University, Mangalore, India. *Corresponding Author

ABSTRACT **Purpose:** The purpose of the research in this context of the remarkable development of the Shirva area due to jasmine cultivation is to define, challenge, and overcome the various problems faced by farmers so that farmers can better shape their life's. The paper describes the jasmine crop's contribution to the development of rural areas. The growers of the jasmine crop have realised impressive economic benefits and increased their income as a result. This article also discover that the same procedures should have to be followed. **Design/Methodology/Approach:** This study based on primary data collected by 100 sample respondents from the cultivators of jasmine and marketing people of Shirva. Secondary data was collected from journal papers, books, web pages, and other scholarly writings. **Finding/Result:** The study helps us to understand the involvement of jasmine growers in the economic growth of the area, thereby attaining all-around development. Achievement of economic growth, free flow of funds, and other challenges to jasmine and its marketing. **Originality/Value:** This study is an attempt to trace the role of jasmine farmers in the development of the rural area and the factors responsible for the economic growth and development of the farmers. **Paper Type:** case study-based research analysis.

KEYWORDS : Jasmine, Framers, Shirva, Achievements, Economic growth, Social and economic development.

1. INTRODUCTION:

Jasmine is revered as the "Princess of aroma" because of how exquisitely fragrant it is at soothing and energising. It goes by a variety of names throughout India, namely Mogra, Motia, Chameli, Malli puvvu, Jaati, Mallige, Jui, and Moonlight in the Grove. In Karnataka, several varieties of jasmine, including Mysore Mallige, Hadagali Mallige, and Udupi Mallige, are grown. About a century ago, in the Udupi district's Shankarapura, Udupi Mallige farming began.

It has been discovered to be more economically feasible among the three types and is widely found in Bhatkal, Udupi, Dakshin Kannada, and Uttara Kannada. In addition to the coastal area, the Udupi Mallige is highly sought for in cities like Mumbai. Because Udupi jasmine, also known as Shankarapura Mallige, is highly distinctive in its smell, special in quality, and well-liked in the area.

It has been certified as a Geographical Indication (GI) on December 23, 2013. The crop's GI tag matches the brand name for the export market, which brings in a good price for the growers.

Unaffected by religion, the bride is decorated with jasmine strings at weddings in the Konkan region. Women still decorate their hair with jasmine strings in everyday life. Jasmine is frequently utilised in temples, festivals, nada pooja, dakkabali, boota kola, marriages and other programmes.

The manufacturing of essential oils, incense, and other commercial goods also has a huge market. In the medical field and Ayurveda, jasmine tea is also widely utilised as a green tea variant. The big size, intense smell, and white colour of Udupi mallige are all a result of the plant's adaptability to the laterite soil and the humid climate of the area.

Udupi jasmine is grown for its fragrant flowers. Every morning before 6.30 a.m., the flower buds are harvested. Growers earn between 60 and 1200 per "atte" of jasmine. An "atte" is made up of four "chendus." A single "chendu" can contain up to 800 jasmine flowers (a set of flowers tied by a string).

Prices in this range, however, are determined by supply and demand factors. The jasmine is strung together, not with thread, but by a string made by plantain stalk. Agents collect "atte" from growers and sell it to retailers in Udupi, Mangalore, Kasaragod, and other places. Udupi jasmine is known as the flower that commands gold prices.

2. Research Gap:

It is noticed that there are evident research gaps in research analysis, with regard to beneficiaries of jasmine cultivation. The mentioned case study also makes an effort to explain various aspects of jasmine farming in Shirva's rural community, which helped to raise the area's

economy, farmers' living standards, and Shirva's overall economic development.

3. Literature Review:

Table 1: Contribution by different scholars for jasmine cultivation

S. No.	Area	Findings	Authors
1	Production and marketing	The study elicited pertinent information regarding marketing costs incurred and returns realised by wholesalers and retailers involved in the marketing of Udupi mallige. The profitability of crop enterprises for various stakeholders was also evaluated in this study. Through the study, the economic analysis of Udupi mallige cultivation appears to be economically viable.	Shrees hail Rudrapur, Kiran Kumar R Patil & Chinnappa, B. (2018) [3]
2	Factors affecting marketing	The purpose of the study is to identify factors affecting marketing. The exploratory factor analysis reveals that factors affecting jasmine marketing are price, lack of infrastructure, fraudulent practices, and a lack of export promotions. The findings show that there is no significant relationship between jasmine growers' socioeconomic status and factors influencing jasmine marketing.	R. Ganapathi (2015) [4]
3	An economic analysis	As per the study, adopting recommended cultivation practises and providing adequate credit would aid in expanding area and increasing productivity of jasmine, as well as strengthening the marketing system.	R. THULASIRA M, & P SIVARAJ (2020). [5]
4	An economic study	The flower farmers have benefited financially from the cultivation of jasmine. In jasmine cultivation, growers incur fewer production costs and generate greater profits. Moreover, they produce more. Compared to other flowers, jasmine is cultivated at a higher level by the majority of growers.	R. Latha & Dr.R. Pichuman i (2018). [6]

5	Role of rural women	The purpose of the study is to determine the role of rural women in post-harvest handling and export of jasmine flowers. The jasmine is a high capital-intensive crop and its cultivation is quite profitable. Thus, there is a need to improve the extension mechanism, which at present is still weak and lacks floriculture orientation and gender sensitivity.	Barad, A. V., Madhuri Gandamalla, Pooja Maheta (2017).[7]
6	Economic conditions	The research focuses on economic conditions such as income, expenditure, savings, indebtedness, area under cultivation, irrigation, and the problem of jasmine flower cultivators.	S.Prethesa Mercy & C.Selva Smiley (2019).[8]
7	Socio - Economic status	The research study aims to find socio-economic status of floriculture farmers in Shirva. Farmers' data were gathered by personally contacting them using a structured interview schedule. The results show that the majority of floriculture farmers have a middle socio-economic status.	Mr. Prashanth M D (2021).[9]
8	Economic analysis	Jasmine is essential in providing significant employment opportunities to rural residents. As a result, it requires deliberate and ongoing attention. Jasmine cultivators, traders, exporters, governments, and others would contribute significantly to the share of Indian Jasmine in both domestic and foreign markets.	Thangamayan , S N Sugumar , S Chandrachud (2019).[10]

4. Research Agenda:

The focus of the study is to analyze how jasmine cultivation has a direct impact on rural economic growth and development. The analysis focuses on the rural development design in which farmers are becoming successful agriculturists. The study also emphasises how jasmine farming promotes rural development and raises the living standards of farmers.

5. Objectives:

1. The purpose of the research is to look into the role of jasmine growers in the all-round development of the Shirva area.
2. To determine the level of social, economic, and financial growth among farmers in that area.
3. To study the status of jasmine farmers.
4. To study the accomplishments of farmers in order to assist rural development.
5. To suggest suitable measures for improving farmers' socioeconomic conditions.

6. Research Methodology:

This study is carried out in the rural area of Shirva. The research study gathered both primary and secondary data. The primary data has been collected with the help of interviews with the cultivators and vendors of jasmine growers. Secondary data is gathered from various research publications on jasmine production and other governmental agencies that have advocated for jasmine farming, which is a commercial crop. Action is also taken to refer to the various reports and services done by government and private agencies to that effect.

Through research methodology, the problem of jasmine farmers was extensively examined and resolved using research technique. The case study has been conducted using both a quantitative and qualitative approach. The generation of data through rigorous quantitative analysis has been done in a formal, rigid manner. The economic circumstances of jasmine farmers have been considered in the light of the quantitative methods through a survey sample. In the relevant group interview, an assessment of changes in attitude, opinion, and behaviour has been conducted.

7. Overview: Shirva Jasmine

Shirva jasmine, also known as Udapi jasmine, is grown in a specific region of Shirva and nearby areas of Udapi district in coastal Karnataka, India. The usage of Shirva jasmine is very localised and mostly people who are acquainted with it engage in its business.

Personal interviews are conducted with the farmers' community. The process of collecting jasmine by the farmers starts early in the morning and finishes by 7 a.m. The jasmine buds are tied together to a string made of plantain stalk. Each chain of buds is called chendu which is about 3 feet long and four chendu is called one atte. One chendu Jasmine chain will contain 800 jasmine buds. The bundles of 3 to 6 attes are packed in banana leaves and tied tightly and sent to sell, which will be collected by selling agents. Each farmer is connected to among the 150 agents which operates in respective area. The agents thus supply these jasmine-tied units to the traders in and around Shirva. The traders sell the collected units to wholesalers located outside the region. Then units will be supplied all over South Kanara, Mumbai, and even Gulf countries.

Day by day, the price is determined by the traders on demand for the jasmine. The wholesale traders will keep track of production and demand in the market to decide the price. The demand is based on auspicious days and religious rituals. Thus, jasmine cultivation has a major impact on socio-economic conditions.

The above study relates to the study of jasmine cultivation in Shirva, Udapi district of Karnataka. Jasmine cultivated in this area got intellectual property right. In order to work out the cost of the economics of jasmine cultivation in that area, 100 farmers were randomly selected. The data pertaining to labour use pattern, resource use pattern, and investment made as well as yield received across seasons were listed by sample respondents using a well-structured schedule to assess the economic viability of the jasmine cultivation. In addition to this marketing aspects of the crop has taken into consideration. It was also made to identify the jasmine traders who are instrumental in marketing. The peculiar feature of jasmine marketing is price fixation in flower market.

8. Findings, Results And Analysis:

During the study it is noticed that jasmine growing will get yield only from the fourth year of cultivation. Hence during these years expenditure made towards establishment of jasmine cultivation is called capital establishment cost. In jasmine cultivation, the operation like formation of ring and basin, weeding, irrigating plants, harvesting and stringing the flowers found to be labour intensive. Jasmine starts yielding flowers from six months of its planting. The yield is higher during summer season and lesser in cold and rainy season.

After third year onwards cultivation of jasmine is considered as maintenance cost inclusive of variable and fixed cost. Labour is considered as main cost in the cultivation. Harvesting, stringing is the labour-intensive operations. In addition, cultural practices like ring and basin formation, weeding irrigation and other works demanding more labour in its cultivation. The expenditure made on material inputs is expected in and around 30 percent cost. Among the material input like groundnut and neem occupied major share of expenditure. The yield was maximum during summer and comparatively low in winter and rainy seasons. The average price per atte is expected 300, whereas it is relatively less than 100 per atte.

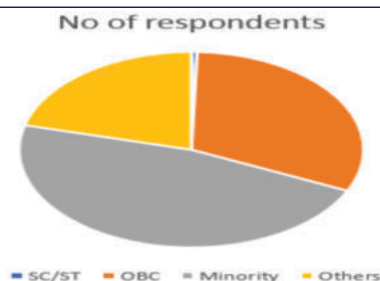
The present study deals with the economic growth and development on jasmine cultivation in Shirva, Udapi district. The sample size of 100 respondents who are cultivating jasmine were selected and the necessary data were collected through interview schedule

Table 2 Community wise classification of jasmine cultivators in Shirva

S.No	Participation of jasmine cultivation	No of respondents
1	SC/ST	0.5%
2	OBC	30%
3	Minority	45%
4	Others	20%

Source: Primary data

According to the above table, 0.5 percent of respondents are SC/ST. It has been determined that 30% and 20% of respondents are OBC and others, respectively. The majority of jasmine cultivators, 45 percent, are from the minority.

**Table 3 Profit margin in various type of crops in Shirva**

S.No	Crops grown in Shirva	Profit margin
1	Paddy	20%
2	Fruits	10%
3	Vegetables	30%
4	Jasmine	40%

Source: Primary data

The above chart gives a clear picture of growing jasmine is more profitable compared to other crops grown in Shirva.

Major findings:

1. Jasmine prices are low during non-auspicious days.

2. Price fluctuations in jasmine are constant, implying that farmers cannot expect a consistent income.

3. Credit sales:

Because of price fluctuations, the traders will take the atties of jasmine to the market without payment.

4. Delay in payment:

The traders will make payments on the next day, or according to their whims and fancies.

5. Inadequate market information:

Farmers and traders are both unaware of the fixed rates and other information about jasmine.

6. Inadequate storage facility:

Jasmine flowers have a lifespan of one to two days. It is a highly sensitive flower that is difficult to store for several days.

7. Lack of organized markets:

The use of jasmine flowers entirely depends on the occasion. Consumption occurs only during religious ceremonies, marriages, or other rituals. The traders are not aware of market demand. The absence of organised markets is one of the causes that results in a loss of income.

8. Lack of export promotion:

Most of the Indians are staying in foreign countries, demanding to supply jasmine. But due to a lack of export promotions, jasmine is not frequently exported to buyers.

9. High cost of transportation:

Transporting jasmine to various places is high-cost and time-consuming. Costs will naturally rise, which will lead to a price increase.

10. Lack of government support:

There is a lack of government support to the jasmine growers. Another factor discouraging farmers from growing jasmine on a large scale is poor financial support and other facilities required for the jasmine cultivation.

8. Suggestions:**1. Quality analysis:**

Udapi jasmine production is highly unpredictable. The quality analysis helps in predicting the future stock based on demand.

2. Price analysis:

This helps in predicting the future price of jasmine. Jasmine's price is unstable. It will vary daily as per production and market requirements. Price analysis will provide an approximate future price based on previous information on prices. It will be based on weeks, months, and years. Thus, users will provide information on future prices, which will

enhance users' buying experience.

3. Stock management:

It is useful to keep track of stock available and stock to be procured. Thus, it will help the jasmine traders buy the produce. Thus, it will help the jasmine traders buy the products.

4. Information Exchange:

It plays a major role in e-commerce. Information on prices, products, trends, etc. will influence the decision-making of customers while buying products. It will gain inputs from price analysis and quantity analysis in providing information.

5. Payment options:

Payment options may include debit cards, cash on delivery, credit cards, and other electronic funds transfer methods. UPI (unified payment interface) based payments are also accepted.

6. Good transport facility:

It is very necessary for the development of jasmine cultivation for the quick disposal of highly perishable jasmine flowers. Shirva is a remote area lacking such facilities.

7. Good storage facility:

This one is very important for maintaining the freshness of jasmine flowers. Cold storage facilities are very essential for flowers to maintain freshness, quality, and life span. None of the farmers have a cold storage facility. It is of the opinion that such a cooperative facility with farmers will greatly help them to keep the jasmine in cold storage or overcome the problem.

8. Non availability of quality seeds:

Most of the farmers have expressed that the non-availability of quality seeds, lack of improved packing technology and the yield are not up to the mark. For packing, the farmers use banana leaves. Lack of quality seeds and an improved variety of seeds result in low yield.

9. Middlemen role in marketing:

It is noticed that during discussion with farmers, the middleman plays a role in the marketing of jasmine products. They exploit the farmers by paying them lower prices, which has to be regulated.

10. Lack of basic infrastructure:

The cultivation of jasmine largely depends on availability of water resources like ground water. The frequent failure of power supply and water supply are also responsible for low yield. Even labour cost is also high hence basic infrastructure should be forbidden by the government.

9. CONCLUSION:

Shirva jasmine cultivation in terms of cost and profit per atte is around 225.10, revealing its economic viability. Though the crop is less expensive in terms of labour availability, it is restricted in its area of expansion. The use of modern techniques and mechanisms is the only alternative to labour problems in jasmine cultivation for the benefit of jasmine farmers. However, a major portion of profits are eaten by the middle man and traders in the day-to-day fixation of prices. Hence, the marketing of jasmine is a great challenge for various reasons.

REFERENCES:

- [1] <https://www.daijiworld.com/news/newsDisplay?newsID=762089> retrieved on 04th Sep 2022.
- [2] <https://timesofindia.indiatimes.com/city/mangaluru/karnataka-shankarapura-jasmine-touches-historic-high-of-rs-2200-per-atte/articleshow/9323404.cms> retrieved on 03rd Aug 2022
- [3] Shreeshaail Rudrapura., Kiran Kumar R Patil., & Chinnappa, B. (2018). Production and marketing of Udapi mallige in Udapi district of Karnataka: As economic analysis. *Journal of Pharmacognosy and Phytochemistry*, SP3, 430-435. Google Scholar
- [4] R. Ganapathi. (2015). A study on factor affecting marketing of jasmine in Dindigul district. *Journal of Management Research and Analysis*, 2(4), 238-242. Google Scholar
- [5] R.Thulasiram., & P.Sivaraj. (2020). An economic analysis of production and marketing of jasmine in Madurai district of Tamil Nadu. *International Journal of Farm Sciences*, 10(2), 60-67. Google Scholar
- [6] R. Latha & Dr.R.Pichumani. (2018). An Economic Study on Jasmine cultivation in Ettarai Village in Tiruchirappalli District. *International Journal of Research and Analytical Reviews*, 5(3), 2348 –1269. Google Scholar
- [7] Barad, A.V., Madhuri Gandamalla., & Pooja Maheta. (2017). Role of Rural Women in Post-harvest Handling and Export of Jasmine Flower. *Universal Journal of Agricultural Research*, 5(6), 329-332. Google Scholar
- [8] Prethesa Mercy, S., and C. Selv. Smiley. (2019). A Study on Economic Conditions of Jasmine Flower Cultivators at Thovalai Village in Thovalai Taluk of Kanyakumari District. *Shanlax International Journal of Economics*, 8(1), 17–20. Google Scholar
- [9] Prashanth, M. D. (2021). A study on socio-economic status of floriculture farmers in Shirva. *International journal of research and development*, 6(8), 2455-7838. Google Scholar

- [10] Thangamayan, S., Sugumar, S.N., & Chandrachud, S. (2019). An Economic Analysis of Jasmine Cultivation in Madurai District, Tamilnadu. *Indian Journal of Public Health Research & Development*, 10(4), 10.5958/0976-5506.2019.00711.3. Google Scholar
- [11] Norbert A. Braun & Sherina Sim. (2012). *Jasminum sambac* Flower Absolutes from India and China – Geographic Variations. *Natural Product Communications*, 7 (5), 645 – 650. Google Scholar
- [12] Seema, M. N., Lakshmana., Shankar, M., Gangadhar Naik, B., & Sandesh, H. J. (2021). Management of wilt of Udupi Mallige caused by *Fusarium solani* in coastal Karnataka. *The Pharma Innovation Journal*, 10(9), 348-351. Google Scholar
- [13] D' souza, D. J., & Joshi, H. G. (2019). E-Commerce Framework for Strategic Marketing of Udupi Jasmine. *AGRIS on-line Papers in Economics and Informatics*, 11(1), 17-26. Google Scholar
- [14] <https://www.sahapedia.org/they-bloom-udupi-mallige-shankarapura> retrieved on 21st April 2021.
- [15] <https://www.thehindu.com/news/cities/Mangalore/area-under-jasmine-goes-up-in-udupi-district/article34484716.ece> retrieved on 05th May 2021.
- [16] <https://www.daijiworld.com/news/newsDisplay?newsID=762089> retrieved on 17th Oct 2020