

A Review of Factors Impacting Small and Medium-sized Jasmine Cultivators

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Abstract:-

➤ Purpose:

The primary purpose of this study is to identify and investigate the factors influencing small and medium jasmine cultivators and economic opportunities for farmers.

➤ Design/Methodology/Approach:

The review paper examines the review on jasmine cultivators using secondary data from journal papers and scholarly research publications and additionally utilises an ABCD examination to assess factors impacting small and medium jasmine cultivators.

➤ Findings:

Jasmine growers face numerous challenges and a complex interplay of economic, environmental, social, and technical factors influences their way of life. Small and medium-sized jasmine agriculture can have a more secure and beneficial future by addressing these issues and highlighting the advantages of these producers, which will be profitable to growers as well as society as a whole.

➤ Value:

This paper will explore in a previous point of view, perspective and improvement in overall factors impacting jasmine cultivators, thus help researcher in identifying the main aspect required for future examination and study.

Keywords:- Jasmine Cultivators, Small and Medium-sized Cultivators, Challenges, ABCD Analysis.

I. INTRODUCTION

Jasmine enjoys a prominent place in India, where it is grown for commercial in the states of Tamil Nadu, Karnataka, Kerala, West Bengal, and Andhra Pradesh. The Persian word "Yasmin," which means "fragrance," is where the name "jasmine" originates (1). Our country's traditional flower crop is jasmine. Jasmine is known as the "Belle of India" or the "Queen of Fragrance" and is one of the most important commercial flower crops. Despite the fact that over 2,000 species are known, 40 have been identified in India, and 20 are cultivated in South India (2).

Mysuru mallige is most frequently grown in Mysuru and the surrounding districts, Udipi mallige is most frequently grown in Udipi, and Hadagali mallige is most frequently grown in the Bellary area. Mysuru Mallige, Udipi Mallige, and Hadagali Mallige all have registered intellectual property rights, and the Indian government has designated these three cultivars as Geographical Indication (GI) plants because of their fragrant and floral qualities. Usually, marginal and small farmers grow these varieties (3).

Jasmine has a gentle smell that inspires feelings of optimism, happiness, and confidence, making it a popular ingredient in the perfumery business and used frequently in religious ceremonies. Stress, nervous weariness, and sadness have all been found to be treated by its aroma. Jasmine has significant demand for the export market, particularly in Gulf countries, where it is well known for its fragrance (4). Jasmine oil complements any floral scent, adding smoothness and elegance to the perfume composition. Jasmine oil has numerous medicinal uses and can be found in perfumery, soaps, flavorings, and the cosmetic industry (5).

II. OBJECTIVES OF THE STUDY

- To understand the impact of small and medium jasmine cultivators.
- To evaluate and study the factors affecting Jasmine Cultivators.
- To identify the challenges faced by the Jasmine growers.
- To study the ABCD analysis of jasmine cultivators based on proposed review study

III. METHODOLOGY

This review study examines the variables influencing Jasmine farmers using secondary data from books, various websites, journals, newspapers, publishing of latest research papers available on different websites, Research Articles, Research Journals, E-Journals etc. have all been used to collect data.

IV. RELATED RESEARCH WORK

There are several research articles available that address the research objectives, but this study focuses on two specific journal articles that examine the impact on small and medium jasmine cultivators. To present the perspectives, the following tabular and descriptive style is associated with a summary and contrast discussion

A. Descriptive Focus

➤ Paper 1

- *Impact on Small and Medium Jasmine Cultivators*

In Paper 1, the impact on small and medium jasmine cultivators has been discussed based on a case study-based research analysis. It has been identified that jasmine cultivation plays a vital role for small and medium farmers in improving an economic condition. The study focuses on the rural development model in which farmers become successful agriculturists [6]. The problem of jasmine farmers was closely examined and solved using research techniques. A quantitative and qualitative approach was used to conduct the case study. Sample respondents used a well-structured schedule to list data pertaining to labour use pattern, resource use pattern, investment made, and yield received across seasons in order to assess the economic viability of jasmine cultivation. Furthermore, the crop's marketing aspects have been considered. It was identified as the jasmine traders, who play an important role in marketing. The price fixation in the flower market is a unique feature of jasmine marketing.

The study begins by emphasising the importance of floriculture as a source of income and employment. Growers of chrysanthemum, jasmine, and crossandra were randomly selected for the research. Different dimensions were considered to quantify the entrepreneurial behaviour of flower growers. Approximately half of the chrysanthemum growers, 37.50% of the jasmine growers, and about two-fifths (42.50%) of the crossandra growers were observed to have a medium level of entrepreneurial behaviour. More than two-fifths of flower growers fall into the medium category in terms of overall entrepreneurial behaviour (7).

In accordance with the outcomes of this research, flower farming shows promising results in terms of improving farmers' socioeconomic conditions, increasing self-employment opportunities, promoting entrepreneurship in both urban and rural areas, and boosting export-trade to earn foreign currency, indicating that it is a potential tool for poverty alleviation and long-term economic growth (8).

The root cause of all of these issues is the problem of unemployment. Floriculture has the potential to become a significant industry. Floriculture can provide a living for many farm families. Traditional flowers grown in open fields, mostly by small and marginal farmers, may face competition from high-quality imported flowers. Similarly, modern flowers may face threats because our flowers are inferior to those of other countries. India will not benefit

from a liberalised trade regime unless the quality of both traditional and modern flowers is improved by providing better infrastructure facilities (9).

Floriculture is an ancient farming activity in India with enormous potential for generating profit for small and marginal farmers. Floriculture production and market are booming these days due to increased demand in both the domestic and international markets. Due to insufficient supply chain and cold storage facilities, sellers are unable to meet market demand, and flower prices have risen during this period (10).

An appealing and significant commercial crop is jasmine. It is significant in all religious, social, and cultural rituals as well as other human activities. Based on the size of their operating holdings, the sample of jasmine farmers was post-stratified into four groups: small (1.01 to 2.0 hectares), medium (2.01 to 4.0 hectares), and large (more than 4.0 hectares). With 152.22 percent and 147.70 percent respectively, marginal and small farms had a higher cropping intensity than medium and large farms, which had 131.01 percent and 122 percent (11).

The floriculture industry is regarded as a high-income producing agricultural sector and has the potential to be used as a tool for socioeconomic development. A small number of exporters, middle-level producers, and small-scale growers run the industry. This study showed how the floriculture industry in the nation is developed through the joint efforts of growers. The primary barriers for growers to increasing their output are a lack of financial support and land availability. The government and growers alike must establish effective national and worldwide marketing channels for floriculture products (12).

➤ Paper 2:

- *Problems of Jasmine Cultivators*

The main focus of the study is on the economic empowerment of jasmine farmers and how the SWOT analysis will aid in identifying and analysing strengths, weaknesses, opportunities, and threats based on respondents' responses and observations obtained during data collection. The results noticed during the research were that jasmine flowering requires special care and attention, from plant growth to marketing. It's a community-based enterprise that provides a consistent source of income. It provides employment for the rural mass since it is a labour-intensive unit and plays a major role in the eradication of poverty. Jasmine cultivation provides a steady source of income. It helps to promote rural livelihoods and food security, which leads to poverty reduction (13).

The research study's objectives are to identify the constraints that jasmine growers face using a random sampling method. In order to reduce the problems of jasmine growers, insecticides, pesticides, and biofertilizers should be available on time. More value-added industries based on jasmine, such as perfumery industries, are required. Plants should be available in large quantities from

government nurseries at the appropriate time; a cold storage unit is required (14).

According to the study, jasmine growers and cultivators are mostly small and marginal farmers who depend largely on market middlemen to sell their produce. Most farmers lack awareness of the market and are illiterate or have limited education. So that they could only make a minimal profit, and sometimes even a loss. As a result, immediate government assistance for agricultural problems is required (15).

As per the study, small and marginal farmers encounter numerous challenges not just during production but also during marketing. An effort has been made to pinpoint the yield gap, the actual production and marketing issues that farmers actually deal with, as well as the potential for this sector to stabilise productivity. As the crop began to produce in the third year, marketing costs began. The main expense in marketing expenses is the commission charges (16).

Based on current trends in area, production, exports, and capital expenditures for floriculture development, this sector has a bright future. Floriculture business can change the face of some villages and has proven to be a good source of income for many families. The various problems of flower farmers and sellers must be addressed properly (17).

The cultivation and planting of flowers for commercial purposes is known as floriculture. Floriculture provides residents with numerous opportunities, not only for farming but also for employment. Rose, marigold, jasmine, lotus, and champa are just a few of the flowers that have been in high demand over the years and are now being exported. Floriculture is purely commercial, with small and medium-sized businesses relying on it. The state government has launched a number of initiatives to promote the industry,

implying that in the long run, an increasing number of entrepreneurs will see it as a challenge (18).

The cultivation of jasmine flower produced impressive returns for farmers as well as good employment opportunities for farm families and agricultural labourers, particularly female workers. The marketing of jasmine flowers, which are highly perishable in nature, requires quick marketing. Price volatility was identified as the primary marketing constraint by all types of farmers. The price of jasmine fluctuated from day to day, and even from hour to hour. This increases the risk in marketing. There is no effective value chain in jasmine production, and farmers face numerous challenges in cultivating and marketing jasmine flower (19).

The grassroots effort is founded on social capital between the buyers, who are wholesalers at the city and worldwide levels, and the producers, who are jasmine growers at the domestic level. A singular arrangement and distinctive local resource may be difficult to replicate in coastal Karnataka, such as a very perishable commodity that requires substantial daily labour inputs for a brief period of time with a consistent and year-round demand (20).

It is generally acknowledged that the security of food and livelihoods may be seriously threatened by global warming and climate change. Better adaptation and long-term planning are required in light of the local climate changes, particularly for the vulnerable low-lying coastal regions in developing nations where 50% of the labour force is employed in agriculture. Implementing site-specific adaptation strategies in this industry will be made easier by gathering local-level, accurate information on future, plausible climate change and its effects on flower productivity (21).

V. NEW RELATED ISSUES

Tabular analysis has been done on recent and important issues pertaining to the research topic. Relevant academic research articles were examined in order to better understand the development of the research in relevant fields.

Table 1 Contributions from Many Academics on the Challenges faced by Jasmine Growers

S. NO.	AREA	FOCUS	OUTCOME	AUTHOR
1	Climate change	Farmers' perceptions of climate change and the proposed agriculture adaptation strategies	Farmers have highlighted increasing warmth, delayed onset, occasional dry periods, and diminishing soil moisture as important variables affecting crop cultivation. Some have begun to adjust to these changes by producing only short-duration crops such as pulses, vegetables, and flowers, particularly jasmine, but there is also a trend to forgo large cereal production and leave more land fallow.	Dhanya, P., (2015). [22]
2	Integrated Pest Management	Growth and yield of Jasmine	The integrative strategy for optimum growth and yield of jasmine plants created by combining <i>Azospirillum</i> sp. and <i>Phosphobacterium</i> sp. inoculation with vermicompost. The combination of suitable biofertilizers and biopesticides improved insect pest management and increased jasmine growth and yield.	Murugan, A., (2019). [23]

3	Integrated Nutrient Management	INM has enormous potential for producing high-quality flowers.	The purpose of this study is to decrease the use of chemical fertilizers while increasing crop production and quality while minimizing any negative effects on edaphic and environmental characteristics. As a result, the focus of this discourse will be on integrative methods to the production and management of several flower crops that are farmed for commercial purposes in India.	Muneeb Ahmad Wani., (2017). [24]
4	Technology Adoption	Adoption behavior of jasmine growers- A critical analysis.	The study focuses on technologies such as optimum spacing, the usage of FYM, and root rot disease management. The study's findings suggested that low adoption in the treatment of nematode infestations and root rot disease was seen due to a lack of awareness and expertise of these technologies. Capacity building by extension officers and scientists may give enough understanding and awareness.	Bagya Janani P, (2016). [25]
5	Production Management	Production schemes and pest management to enhance the viability of jasmine production	Cultural management and harvesting practices must be improved by providing appropriate production inputs as well as the necessary tools and equipment for quick farm operations. When growing jasmine alongside cash crops, an integrated pest management (IPM) programme should be established, and resistant varieties should be developed. To raise the economic worth of jasmine and expand the market for its high-value products, institutional and financial assistance is also crucial for research on processing technology.	Fernando C. Sanchez, Jr. (2010). [26]
6	Packing Technology	Self-life of Jasmine flower	Farmers' biggest challenges include a lack of packaging materials that are appropriate, a shorter flower shelf life, and browning of the petals on the second day of harvest with a sudden loss in scent. Jasmine blossoms are packaged in polythene bags of various gauges and under various storage conditions, including room temperature, in a refrigerator, and also in thermocol box packaging.	Yathindra, H. A., (2018). [27]
7	Post Harvest Management	Standardization of post-harvest management techniques	Standardizing post-harvest management methods for flowers from a clonal selection of the underutilized jasmine was a study's main challenge. The visual quality of flowers was observed in terms of freshness index, flower opening index, color retention index, fragrance index, and shelf life. Physiological parameters related to the post-harvest quality of flowers were also observed, including moisture content, relative water content, physiological weight loss, membrane integrity, and total carbohydrate content.	Manimaran. P, (2018). [28]
8	Post-harvest Handling and Export	Role of Rural Women in Post-harvest Handling and Export of Jasmine Flowers	A labor-intensive crop, jasmine. Due to the short shelf life of the harvested flowers, farmers frequently face storage challenges during the height of the flowering season. No time should be lost on transportation for export after the flower harvest.	Barad, A. V., (2017). [29]
9	Training	Training on Jasmine cultivation	Conducting training was the challenging element of this study. In order to increase the income of farm families with limited resources, jasmine growing programmers were designed to make it more common as a component crop in homesteads. The research revealed that jasmine cultivation training sessions had a significant impact on the women, emphasizing farm women's empowerment through technological literacy.	Leena, S., (2014). [30]
10	Trends and Technological skills	Skills assessment of flower cultivation with regard to trends and technology.	The study was carried out to assess trends in flower cultivation. A skill gap analysis for flower cultivation was done in relation to seed, pruning, bio stimulants, top dressing, management of pests and diseases, fertilizer management, application of biofertilizer, regular rejuvenation of rose and jasmine. In the handling of seed	Nazreen Hassan, S., (2019). [31]

			material and the administration of bio stimulants or micronutrients, significant skill gaps were found.	
11	Value Chain on Flowers for Domestic and Export Markets	The impact of NAIP on technology adoption among jasmine growers.	On small and medium farms was the study's main focus. Based on the awareness, knowledge, and adoption index, the influence was examined both before and after NAIP implications. High cost of inputs was the major challenge that limits the farmer from adoption of precision production technologies in jasmine cultivation.	Ravikumar, R., (2012). [32]
12	Qualitative and Quantitative Flower Quality	Jasmine flower quality criteria during the lean flowering period	This study's key obstacle is figuring out the fundamental qualitative and quantitative flower quality parameters and the optimal variety for lean season growth, with the goal of preserving an uninterrupted supply chain to exporting nations during the lean flowering season. Floral characteristics varied among the cultivars. This could be due to their genetic makeup as well as the influence of agroclimatic environments.	Monika Patel., (2017). [33]
13	Problems of floriculture in costal Karnataka	Challenges of floriculture farmers	According to the study, insufficient technology, improper knowledge of the way to employ high-quality planting materials, and insufficient or nonexistent guidance have led to low productivity.	Prashantha Kumar M, D., (2021). [34]
14	Adoption Behavior	Jasmine growers' adoption of the advised cultivation methods.	Most jasmine farmers have only partially or not at all adopted disease control, spacing, insect control, fertilizer doses, etc. In order to get the farmers to use these methods, educational efforts must be stepped up. The study also observed that growers of jasmine faced a number of production, marketing, and credit restrictions, with labor availability being one of the greatest challenges.	Sivashankar, N., (2011). [35]
15	Challenges faced by flower farmers	A qualitative study- Issues faced by farmers	The challenges that flower farmers encounter are numerous, particularly in the areas of marketing, production, and cultivation. The function of middlemen in the flower farming sector needs to be reviewed. The intermediaries are important, but they also take advantage of the flower farmers when setting prices, determining the quality of the flowers, and weighing the flower.	Yoganandan G., (2020). [36]

Table 2 Researchers Contribution on Marketing Aspect of Jasmine Growers

S. NO	AREA	FOCUS	CONTRIBUTION	AUTHOR
1	Production and marketing	Assess economic viability and marketing aspect of Udupi Jasmine cultivation	The study gathered significant information on the marketing expenses paid for and profits made by wholesalers and merchants involved in the promotion of Udupi mallige. This study also examined the profitability of crop operations for various stakeholders. The study indicates that the economic analysis of Udupi mallige agriculture is viable.	Shreeshail Rudrapur., (2018). [37]
2	Factors affecting marketing	Exploratory factor analysis	The findings show that the socioeconomic condition of jasmine growers and the variables influencing jasmine marketing do not differ significantly. Based on the regression analysis, price has a positive and significant impact on jasmine growers' satisfaction with the marketing of their product, while infrastructure issues, dishonest business practices, and a lack of export promotions have a negative and significant impact.	Ganapathi, R., (2015). [38]
3	Production and marketing	Constraints in the production and marketing of cut flower growers	According to the outcomes, the prevalence of pests and diseases, a lack of freshwater, high work costs, and a labor shortage were the main production restrictions. Major marketing obstacles included price volatility, late payments, a low price for the flower, a lack of market knowledge and intelligence, and a high transport cost. As a result, the government should develop appropriate and useful laws to support the flower industry and to protect against financial	Oliyarasan, S., (2018). [39]

			instability and business failure.	
4	Production and marketing	Factors driving farmers to plant jasmine, marketing patterns, and farmer satisfaction.	In accordance to the study, floriculture, a significant sub-sector of horticulture, has the potential to provide increased returns to farmers as well as job prospects, particularly for small and marginal farmers and female workers. Overall, jasmine growers were satisfied with the output and sale of jasmine flower. Jasmine growers must turn threats into opportunities by enhancing productivity and marketing.	Kanniammal, K., (2016). [40]
5	Strategic Marketing	E-commerce framework for strategic marketing	The purpose of this research is to create an e-commerce platform for the strategic marketing and promotion of Udupi jasmine. According to the study, the advantages of e-business are not used at all in the current framework. In light of the current primitive system, the research aims to convince Jasmine to use a customized e-commerce framework.	D'souza, D. J, (2019). [41]
6	E-commerce	Explore consumer willingness of using E-commerce to purchase	This study focuses on examining consumer propensity to purchase Udupi jasmine through online commerce. Consumers were shown a test web application for online shopping that was developed. The tendency of consumers to purchase jasmine online and their propensity to tell others about the e-commerce web application are positively correlated, according to the study.	D'souza, D. J, (2020). [42]
7	Jasmine flower marketing	Problems faced by Jasmine cultivator in marketing	The study adopted multi-stage stratified random sampling to assess the problems faced by jasmine cultivators. The problems that arise are multifaceted, ranging from agronomic concerns to pest and disease management, post-harvest processing, marketing, and financing.	Karthick, K, (2016). [43]
8	Production and marketing	An economic analysis of production and marketing of Jasmine	In the study, two marketing channels were found, with channel II having the greatest producer share of the consumer's rupee. The main challenges that the growers faced were the prevalence of pests and diseases, expensive commission fees, erratic price changes, and a lack of a well-developed marketing infrastructure.	Thulasiram, R, (2020). [44]
9	Cultivation and marketing	Factor influencing Jasmine cultivation and marketing	According to this study, there are seven main elements that affect jasmine production and marketing, including price quality, supply and demand, festivals, weddings, the time of disposal, trader competition, and others.	Manoharan, S, (2015). [45]

Table 3 Contribution of Researchers to the Financial Viability of Jasmine Cultivation

S. NO	AREA	FOCUS	CONTRIBUTION	AUTHOR
1	Cost and return structure	An economic analysis of cost and return structure of Jasmine cultivation	According to the study, fertilizers, planting equipment, and maintenance costs were all expensive. As the crop began to produce in the third year, marketing expenses increased. The charge for commissions is the main cost element of the marketing expenses.	Kumar, S, (2013). [46]
2	Cost benefit analysis	Economic performance of Jasmine cultivation	The study has been undertaken to assess the costs and benefits of jasmine cultivation. The analysis uses statistical methods like ratios and percentages. The analysis considers both direct economic costs and benefits. According to the study, the benefit-cost ratio is 2. Additionally, it is generating wage jobs and self-employment. Jasmine flower production is advantageous to both the grower and society as a whole. It is a viable activity.	Swapna, B, (2018) [47]
3	Financial feasibility analysis	Productivity and financial feasibility of jasmine farming business	The cultivation of jasmine flowers was a viable enterprise with potential. A greater orientation towards financial gain is provided by a side employment of jasmine flower landscaping. It should be able to boost the added value and earnings of the farming enterprise.	Prasetyo, E, (2019). [48]
4	Financial feasibility	Financial analysis and credit gap analysis	The cost and returns incurred in cultivation for the following years after establishment were calculated on an annual basis. Credit facilities for the crop are only provided by the (NABARD). The study has recommended that farmers	Ashika, M, (2019). [49]

			investment on Jasmine cultivation was feasible, but the farmers' credit needs must be met by the financial institution.	
5	Financial Literacy	Assessment of Farm Financial Literacy among Jasmine Grower	The findings showed that factors such as age, education, experience, farm income, length of banking relationship, size of landholding, frequency of bank visits, and bank account had a significant impact on farmers' financial literacy.	Ravikumar, R, (2013). [50]
6	Yield and economic analysis	Pruning month, growth regulators and fertilizers application.	The research focuses on the effect of pruning month, foliar application of growth regulators, and regular fertilizer application on yield, as well as an economic analysis of off-season flower output. The results of this experiment suggested that plants pruned in September with nitrobenzene foliar spray and split fertilizer application at an alternate month recorded the highest BC ratio.	Keerthishankar, K, (2022). [51]
7	Yield Estimation and Market Price	Profitable Period for the Jasmine Farmers Based on its Yield Estimation and Market Price	The lean season is the optimum time for farmers to make a greater profit, according to this analysis of the profitable period for jasmine farmers based on yield estimation and market pricing.	Kousalyaa Devi, K. S, (2019). [52]
8	Yield Gap	Constraints and yield gap in jasmine cultivation	The purpose of the study is to determine the yield gap, the production and marketing issues that farmers actually confront, as well as chances that productivity in this industry will stabilize. Based on the production and marketing constraints, the findings showed that there was a yield gap in jasmine.	Janaki Rani, A, (2020). [53]
9	Profitability	Production and marketing	The study also makes an effort to determine the marketing routes, value chains, and production of flowers. Based on this study, growing flowers improves farmers' socioeconomic circumstances, opens up more opportunities for self-employment, and boosts entrepreneurship. Despite the issues and limitations mentioned in this study, domestic flower cultivation and commercialization have enormous profit margins.	Mou, N. H, (2012). [54]
10	Investment feasibility	Feasibility of investment in jasmine garden	The study explores the marketing of jasmine and the viability of investments. The outcome revealed a favorable benefit-cost ratio, reflecting the financial and economic success of the jasmine investment. The investment in jasmine is considered to be both commercially and financially viable based on the internal rate of return and payback duration.	Kumar, S, (2013). [55]

Table 4 Contributions from Many Academics to the Value-Added Products of the Jasmine Flower

S. NO	AREA	FOCUS	CONTRIBUTED	AUTHOR
1	Jasmine essential oil	Formulation of Natural Facial Cleanser	A facial cleanser that is safe for humans is created using jasmine essential oils. The new jasmine facial cleanser in Vietnam's cosmetics range has a lot of potential. However, in order for the product to be developed into a commercial one, its antibacterial and antioxidant capabilities need be assessed.	Nguyen Dinh Phuc. (2019). [56]
2	Jasminum sambac plant	Potential medicinal plant	This study explores its relevance to daily life as well as the enormous medical potential of the Jasminum sambac plant. Dysmenorrhea, amenorrhea, ringworm, leprosy, skin illnesses, as well as analgesic, antidepressant, anti-inflammatory, antiseptic, aphrodisiac, sedative, and expectorant, have all been treated using jasminum sambac.	Mourya, N. (2017). [57]
3	Herbel hair oil	Prevent hair loss by using herbal hair oil	This study offers recommendations for producing herbal hair oils with minimal or no adverse effects using natural substances. Jasmine is one of the ingredients used to make hair oil. The oil gains a pleasant aroma from the jasmine flowers, which also act as antibacterial and conditioning agents.	Bind, N. (2022). [58]
4	Jasmine tea	Comparative advantage analysis of production of	The new era is marked by people's search of happy fragrance as well as green health. the blending of tradition with style, or the blending of flowers and tea. The jasmine tea sector should work together to take advantage of the potential in five areas,	Wu, Q. (2021). [59]

		jasmine tea.	including supporting the market, acquiring and inventing, increasing exports, producing huge volumes, and converging forces.	
5	Essential oil	A Value-Addition for Improvisation of Commercial Floriculture in India	The current study should concentrate on finding fresher sources of aromatic ornamentals from natural environments, standardizing specialized extraction methods for different plant species, isolating fresher components, and selecting the best packaging methods for storage and sale.	Maitra, S. (2016). [60]
6	Tempeh sausage	Antimicrobial activity of jasmine flower extract in tempeh sausage	The objective of this study was to determine whether jasmine extract works as an antibacterial agent in tempeh sausage while being stored at 4 °C. According to the findings, the Jasmine extract in ethyl acetate solvent was the most successful at preventing bacterial growth.	Sihite, N. W. (2018). [61]
7	Product Development from Jasminum sambac Flower Extracts	Floral Fragrance and Multiple Physiological Activities	According to the study, J. sambac flower extracts can be used as an excellent antioxidant, skin-whitening, and nontoxic ingredient in the pharmaceutical, cosmeceutical, and food industries.	Li-Chun Wu et al. (2021). [62]
8	Cocoa Butter with Jasmine Oil as fragrance	Solid perfume base	In this study, cocoa butter served as a base for solid perfume. The product's ideal concentration of it was determined. Jasmine oil was used as a scent after melting cocoa butter and beeswax to create solid perfume.	Septiyanti, M. (2020). [63]
9	Natural Facial Cleansers	Exploring jasmine essential oil application	Jasmine essential oils are used to create a human-safe face cleanser product. A brand-new cosmetic item in Vietnam with a lot of potential is jasmine facial cleanser. To be developed into a commercial product, the product's antibacterial and antioxidant capabilities need to be assessed.	Phuc, N, D. (2019). [64]
10	Essential oil market	Market size by products	Due to the numerous health benefits that natural fragrances, such as essential oils, offer over synthetic fragrances, such as those found in aromatherapy, the market for natural fragrances is expected to grow rapidly in the years to come.	Ahuja, K. (2019). [65]

VI. CURRENT STATUS

The review specifies that the majority of small and medium farmers in these economies remain significantly dependent on wholesale agents and dealers for market information and credit resources. [66]. Jasmine cultivators face challenges related to market structure, pricing, and marketing behaviour that may impact their profitability and economic conditions. Organised marketing structure helps to improve jasmine cultivators' status.

VII. IDEAL SOLUTION, DESIRED STATUS & IMPROVEMENTS REQUIRED

A comprehensive assessment of their cultivation methods, market positioning, and financial feasibility would be the ideal strategy for analysing small and medium jasmine growers. The desired status should include improved market access, sustainable farming practices, and better income for these producers. To attain this, improvements are needed in a number of areas, including the use of technology for higher yield and quality, access to fair pricing and distribution networks, and support for organic and sustainable agricultural methods.

VIII. RESEARCH GAP

A specific research gap exists in the optimization of sustainable agricultural practices to improve yield and quality while minimizing resource inputs and environmental effect. While there is considerable literature focusing on the unique challenges and opportunities faced by small and medium cultivators. Furthermore, limited attention has been directed towards exploring innovative marketing strategies, post-harvest handling methodologies, and value chain integration tailored specifically to this demographic. Bridging this research gap is essential for fostering inclusive and economically viable jasmine cultivation systems that empower small and medium cultivators to thrive in the competitive commercial market.

IX. RESEARCH AGENDA

Jasmine flowers are well-known for their captivating aroma and aesthetic appeal, making them popular in a variety of industries such as perfumes, cosmetics, and ornamental decoration. This study agenda intends to give a comprehensive commercial analysis of jasmine flower cultivation, focusing on essential areas of research and development.

➤ *Market Analysis and Forecasting:*

- *Examine current market trends and demand for jasmine flowers in both domestic and foreign markets.*
- *Forecast seasonal, festival, and cultural events that drive jasmine consumption.*
- *Identify potential supply chain gaps and market expansion opportunities.*

➤ *Optimization of the Supply Chain:*

- *Assess the entire supply chain, from production to distribution, and identify any problems or inefficiencies.*
- *Explore alternatives for cold storage, transportation, and packaging to increase shelf life and reach far-off markets.*

➤ *Socioeconomic Impact and Community Development:*

- *Study the socioeconomic effects of jasmine growing on rural areas, including creating employment and income enhancement.*
- *Implement community development program that focus on enhancing infrastructure, healthcare, and education.*

➤ *Post-Harvest Management and Value Addition:*

- *Study post-harvest management techniques to extend flower self-life and maintain fragrance.*
- *Explore value added products like jasmine-infused cosmetics, teas, culinary ingredients diversify revenue streams.*

➤ *Policy Advocacy and Government Support:*

- *Collaborate with authorities to advocate for favorable policies that promote small and medium- jasmine flower cultivation.*
- *Encourage government support for the sector through subsidies, grants, and technical assistance to enable long-term growth.*

X. RESEARCH PROPOSAL

➤ *The Paper Recommends that a Significant Investigation be Carried out to better Understand and Enhance the Condition of Small and Medium Jasmine Farmers after Thoroughly Examining and Analyzing the Research Literature.*

- *Proposed title (comprehensive) Jasmine Flower Cultivation: A Commercial Perspective*
- *Geography: Udupi District*
- *Target respondent's (Farmers/ intermediate/ consumer).*
- *Objectives*
- *To identify the challenges faced by Jasmine flower cultivator.*
- *To suggest suitable measures for improving farmers' socioeconomic conditions.*

- *To explore whether growing of Jasmine has improved on levels of incomes of farmers.*

XI. ABCD LISTING

The ABCD framework can be used to analyze individual qualities, system characteristics, the effectiveness of a concept or idea, and the effectiveness of a plan while evaluating corporate value in society [67]. Advantages, Benefits, Constraints, and Disadvantages are abbreviated as ABCD [68]. The ABCD analysis paradigm can also be used to evaluate a given resource based on its intended use in society [69]. A business model, operational concept, or functional system's effectiveness is examined using the ABCD method, which considers six factors: organizational factors, operational factors, technology, employer-employee issues, customer issues, and social and environmental issues [70].

➤ *Advantages:*

- **High Demand:** Jasmine is a popular and highly demanded flower, especially in the perfume and cosmetics industries. Small and medium cultivators can benefit from a consistent market demand for their product.
- **Cultural Significance:** Jasmine is valued for its religious and cultural significance in many societies, which sustains a consistent demand for it at traditional occasions like weddings and festivals and gives growers a reliable source of revenue.
- **Natural Pest Repellent:** Jasmine plants naturally repel pests, reducing the need for artificial pesticides and promoting healthier, more environmentally friendly farming methods.
- **Value-Added Products:** Jasmine producers can diversify their business by producing value-added items like essential oils, perfumes, and scented candles, which increases their profit margins. For instance, jasmine oil inhalation enhanced brain wave activity and psychological states (71).

➤ *Benefits:*

- **Income generation:** Growing jasmine can give small and medium farmers a consistent source of income, improving rural livelihoods and promoting economic stability. Jasmine farming has emerged as a viable alternative source of income for small and marginal farm women (72)
- **Skill Development:** Growing jasmine needs specialized knowledge and abilities, allowing growers to develop their horticultural and plant-care skills.
- **Environmental Impact:** If done properly, jasmine growing can help to conserve the environment by fostering biodiversity and minimizing the usage of synthetic pesticides and fertilizers.
- **Community and traditional Ties:** Growing jasmine frequently includes the entire community, strengthening social bonds and preserving cultural tradition.

➤ *Constraints:*

- **Climate Sensitivity:** Jasmine needs particular temperatures and humidity levels for optimum growth and is sensitive to changes in climate. Variations in the climate can affect yield and quality.
- **Seasonal nature:** Jasmine normally has a certain flowering season, which causes income for growers to fluctuate. Financial difficulties may result from this in the off-season. In peak season, jasmine flower prices are cheap, whereas in lean season, flower prices are high (73).
- **Labor intensive:** Jasmine cultivation requires a lot of labor, which small and medium growers may find challenging to maintain, particularly during busy times like harvest and pruning.
- **Market Fluctuations:** The profitability of small and medium-sized farmers may be impacted by market volatility and competition on the prices of jasmine products.

➤ *Disadvantage:*

- **Price Volatility:** Jasmine prices might fluctuate depending on the weather, consumer demand, and general market trends. Price fluctuations cause significant challenges for jasmine growers. Especially for small and marginal jasmine growers (74).
- **Resource-Intensive:** Growing jasmine needs a lot of resources, including land, water, and inputs like fertilizer and insecticides. Small and medium-sized growers could find it difficult to achieve these requirements.
- **Limited Access to Technology:** Small and medium-sized farmers may not have access to advanced agricultural techniques and technologies, which can affect output and overall effectiveness.
- **Dependence on Middlemen:** Farmers' profitability may be impacted by cultivators being exploited by middlemen who manage the distribution and cost of jasmine products. The major looting parties in this process are commission agents. Farmers are compelled to sell their goods to them because they finance them when they are in desperate need (75).

XII. FINDINGS

- Jasmine cultivation is of labor-oriented unit. It plays major role in eradication of poverty and thereby decrease the rural unemployment.
- Small and medium-sized jasmine cultivators may face difficulties as demand and market prices fluctuate. Consumer tastes, economic conditions, and global trade dynamics can all impact jasmine cultivation profitability.
- The availability of trained labor, particularly during peak cultivation periods such as harvesting, could be a challenge. This could have an influence on harvest quality and potentially increase labor costs.

- Weather patterns are changing, and the frequency of extreme weather occurrences is increasing, which may have an impact on jasmine farming. Crop yield and quality may be impacted by unpredictability of rainfall, temperature changes, and drought conditions.
- Due to constrained distribution networks or challenges with export criteria, small and medium-sized farmers may have trouble reaching wider markets.
- Access to credit and financial resources may limit small and medium farmers' capacity to invest in critical infrastructure, technology, and expansion.
- Limited processing and value-added activities may restrict growers from obtaining larger margins by producing goods other than raw jasmine flowers, such as essential oils or perfumes.
- Government policies, subsidies, and assistance programmers, whether favorable or unfavorable, can have a considerable impact on the prospects of small and medium jasmine cultivators.

XIII. SUGGESTIONS

- Encourage cultivators to participate in training programmers that educate them about improved agricultural techniques, pest management, and market trends.
- In order to assist growers in making investments in better infrastructure and technology, consider the need for financial support mechanisms, such as microloans and subsidies.
- Promote the importance of establishing direct market connections for growers to reduce reliance on middlemen and guarantee fair prices.
- Encourage the adoption of climate-resilient techniques including shade netting, water-efficient irrigation, and drought-tolerant plant species.

XIV. CONCLUSIONS

In this study, all of the relevant factors affecting small and medium jasmine cultivators were thoroughly examined. The issues impacting jasmine growers are varied, and a complex network of economic, environmental, social, and technical influences has an impact on their way of life. By addressing these problems and focusing on the strengths of these cultivators, we may pave the path for a more reliable and profitable future for small and medium jasmine cultivation, benefiting both growers and society as a whole. In order to provide the required support and resources for the improvement of the growers and the jasmine sector as a whole, collaboration amongst stakeholders is essential. This includes government agencies, agricultural groups, and academic institutions.

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