THE ROLE PLAYED BY THE PURPLE REVOLUTION IN KASHMIR

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Abstract

The purpose of this study is to understand the phenomenon that is the Purple Revolution within the Indian state of Jammu and Kashmir and its contribution to employment within the state, to import-export and to the production of lavender oil. Lavender production is appealing due to its lower operating costs, high profit rate, and significance in rural development. This paper would analyse the Purple Revolution through a phenomenological approach. It seeks to understand how India could accelerate and improve this phenomenon by a comparative analysis with Bulgaria, the world's current leading producer of Lavender oil. Lavender cultivation has a significant impact on internal factors like employment, production, profit, and external factors such as international trade (import-export) and the interdependence between such factors will be analysed in this paper.

JEL Classification: Q17, Q18
Keywords: : Agricultural Exports; Agricultural Imports; Agricultural Policy

1. INTRODUCTION

The plant *Lavandula angustifolia*, which bears lavender flowers, is used to make lavender oil. To encourage the cultivation of lavender, the Central government and the Council of Scientific & Industrial Research (CSIR) launched the Aroma Mission in 2016. In Phase I, lavender seedlings were initially distributed to farmers free of charge. Farmers who had previously been growing lavender, were sold seedlings for Rs 5–6 per sapling. With the assistance of IIIM (Indian Institute of Integrative Medicine), the farmers in Jammu were able to sell these blooms locally and also contribute to the exports. Farmers in Doda and other Jammu and Kashmir districts such as Rajouri, Ramban, and Pulwama, where the Mission was inaugurated in 2018, provided lavender extracts to candle and aroma oil production enterprises such as Ajmal Biotech Private Limited, Aditi International, and Navnetri Gamika. To satisfy the rising demand, CSIR-IIIM Jammu installed four distillation units in Doda, and the installation of two more units has been suggested by it in Phase I.

The CSIR began Phase II of the Purple Revolution in response to Phase I's success, which involved more than 45,000 qualified human resources and provided help for more than 75,000 households in Jammu and Kashmir. The climate in Jammu and Kashmir, according to officials, is ideal to grow lavender, as it can withstand both chilly winters and pleasant summers. The lavender crop doesn't need much wates and isn't likely to be harmed by pests. Lavender oil is extracted to create products like soap, cosmetics, scents, air fresheners, and medicines. After just two years of planting, lavender crops can be used and blossom for fifteen years. India is currently a net importer of lavender oil and aims to become a net exporter of lavender oil through the expansion work of the CSIR Indian Institute for Integrative Medicine in Jammu, India.

The Aroma Mission through the Purple Revolution aims to bring about a revolutionary change in the fragrance industry, consequently promoting the expansion of the aroma sector and rural employment, through targeted interventions at the cultivation, refining, and product development of the lavender crop. Essential oils are highly sought after in the fragrance industry, especially lavender oil. Hence, lavender will soon become an established crop through the Purple Revolution. It aims to considerably assist farmers by increasing income, utilising waste lands, and preventing unrestrained grazing animals. It aids the government's objective

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of tripling agricultural earnings by 2022. Through it, the Start-Up India initiative would be strengthened, the entrepreneurial spirit in the area would be promoted, and aspiring farmers and agrientrepreneurs would be provided with a means of sustenance. The driving hypothesis of the study is that the Purple Revolution in Jammu & Kashmir has positively impacted its agricultural economy.

1.1. Objectives

The objectives of this study are:

- To understand the profitability due to import and export of Lavender.
- To execute a comparative analysis between the production and pricing of lavender oil in Bulgaria and Kashmir.
- To study the scope of growing employment created in the lavender sector.

2. LITERATURE REVIEW

Many farmers and young entrepreneurs have found employment in geographically distant parts of J&K due to production of lavender. “Lavender is currently grown on more than 300 acres in various regions of J&K by more than 1000 agricultural families.” (Gairola, 2022). Each lavender cultivator has at least four other workers working for them. More than 5000 farming families in the area are now employed. The gathering and processing of lavender flowers is mostly done by women, which has led to a rise in their income. A few young company owners have launched small enterprises by producing lavender oil, hydrosol, and dried flowers on a small scale. “Dr. D. Srinivasa Reddy, Director, CSIR - IIIM, Jammu, while highlighting the significance of the Field Station, Pulwama informed that the station had been the epicentre of industrial farming, especially Lavender for enhancing farmers income and women empowerment in the Union Territory of J&K.” (PIB Delhi, 2021)

“Farmers are provided with distillation units, training in extraction, and planting materials. Many of them have become entrepreneurs as lavender oil is highly sought after” (Mohidin, 2015). In addition to lavender, the CSIR has introduced numerous high-value aromatic and medicinal cash crops in J&K. These crops are currently being expanded as part of the Aroma Mission Phase II, and the floriculture mission was recently launched. Farmers' and women's lives will undergo a much-needed transformation as a result of this.

More than 2500 farmers and young business owners from J&K received skilled training from CSIR-IIIM under the CSIR Aroma Mission in cultivation, processing, value addition, and marketing. These are extremely valuable skills, as versatility would increase their chances of employability. Lavender oil production in J&K will support import substitution and conserve foreign exchange. Additionally, there is a great market for exporting lavender oil due to its high demand worldwide. In 2020, it was predicted that the global market for lavender oil would be worth $106 million.

The CSIR-IIIM in Jammu's successful end-to-end that is automatic lavender cultivation technology transfer to J&K farmers as part of the Aroma Mission has received extensive national and international print and electronic media coverage through media houses like The Hindu, Deccan Chronicle, India Times, etc. The CSIR-IIM report states that “The Purple Revolution is drawing entrepreneurs and farmers from all over the nation to invest in the agro – economy and give impetus to the start-up culture in India.”

Lavender oil production is set to increase over the next few years, helping to replace imports and save foreign exchange reserves. In addition, lavender oil is in high demand worldwide, so there is also a great opportunity for export. While global demand for lavender oil remains stable, there is a shift towards lavandin oil. Despite this, high-quality lavender oil is still primarily used in fine fragrances and aromatherapy, making it less suitable for mass-market applications. “Growing consumer preference for natural and organic products could drive additional demand for lavender oil” (Giray, 2018). “Global demand for lavender oil is estimated at about 12,000 metric tonnes per year, while domestic consumption of lavender oil is more than 250 tonnes per year. Lavender oil produced from the cultivation of lavender in J&K is of superior quality. Low production costs (Signup Trending Nature, 2021), high quality essential oils combined with high market demand have made lavender farming at J&K extremely profitable and well known.” says the CSIIR-IIM study.

3. METHODOLOGY

A phenomenological approach and a comparative analysis have been conducted between indicators such as local and international market prices, import export, year – wise production, and so on in European and Indian regions of lavender cultivation. A phenomenological research design is a descriptive research design aimed to accurately describe the structure of a phenomenon. This tool of research has been chosen keeping in mind that the phenomenon i.e. the Purple Revolution, is extremely recent due to which a majority of data available is qualitative in nature along with the presence of limited quantitative data. A phenomenological assessment helps examine the phenomenon that is the Purple Revolution, its output, profitability in lavender trade, import-export, and employment opportunities created. Measurement of the volume of demand exported by India and the factors that incentivise India to produce lavender will be investigated as well. The comparative analysis compares production data and import and export volume. The aim of this analysis is to understand the factors permitting Bulgaria to take the global lead in lavender oil production and aid India in incorporating similar strategies to help increase its significance in lavender trade globally.

4. ANALYSIS

During the bloom season, the Serhama lavender field in South Kashmir's Anantnag area attracts lots of tourists. Sabzar Ahmed, a gardener, used around 8 hectares of land to cultivate lavender (Nabi, 2022). Lavender farming has proven to be extremely profitable for thousands of farmers in the union territory of Jammu and Kashmir. On more than 200 acres of land in J&K, approximately 5,000 farmers and businesspeople cultivate lavender, according to government estimates. Farmers used to make around Rs. 2,500 per kanal (approximately 19.77 kanals is equivalent to a hectare) a year, but since lavender was introduced, their net income has increased to between Rs. 3,50,000 and Rs. 5,50,000 per hectare yearly. From the second year of cultivation, the lavender oil production increased, and farmers earned between Rs. 15,000 and 20,000 per kanal. One litre of lavender oil costs Rs. 20,000. Planting material costs are provided free under the Aroma mission. The land preparation cost and the labour cost consist of Rs. 2500 and Rs. 10,000 on average. The fertiliser cost is Rs. 1400, and the transportation cost is approximately Rs. 1000. Including the cost of pesticides which is Rs. 500, along with the miscellaneous cost, which is Rs. 1000, the total cost obtained is Rs. 16,400. 1 kg of lavender oil costs around Rs. 20,000 which proves that revenue generated is greater than the cost of production (Rs. 16,400). Lavender cultivation has expanded to grow on an estimated 900 acres, producing 3000 kilogrammes of lavender oil annually. The average output of lavender is 50 litres per hectare, and its increasing popularity is the reason for this growth. As a result of the increased demand for high-quality planting material and scientific support, farmers from J&K, Uttarakhand, and Himachal Pradesh are now coming to CSIR-IIIM in Jammu to learn about growing lavender.

In previous years, farmers earned significantly fewer growing cereals such as maize, rice, and millets as compared to lavender cultivation. The cultivation of lavender has resulted in multiple increases in their earnings. It is a perennial crop and requires low maintenance as compared to traditional crops. Low maintenance costs and high-income earnings prove lavender to be extremely profitable. Lavender growing has been encouraged by the Jammu and Kashmir Agriculture Department because of its advantages and profitability. The state's economy has grown as a result of the increased employment and entrepreneurship brought about by lavender. It requires only 3 years to mature and remains productive for 20 years with a lower disease incidence than traditional crops, which take 10 to 15 years to gestate.

There is an increasing demand for lavender in North America, Europe, China, and Japan due to the rising popularity of natural health products and healthcare. Poverty within Kashmir is mainly due to unemployment, and an increase in lavender cultivation will increase employment opportunities, thus alleviating poverty within the state. The Budgam district in J&K witnessed a significant rise in employment from 2012 to 2018. The J&K Economic Survey estimated that employment increased by 20% between 2018 and 2019 (N. Akhter Wani & Jangale, 2021). The lavender industry generates revenue and jobs for tourism as well. Kashmir is capable of producing 200 to 300 tonnes of lavender oil worth 90 to 135 crores of dollars annually, which will be

sufficient to meet the nation's domestic requirements. Doda farmers yielded 300 litres of lavender oil in 2019, 500 litres in 2020, and 800 litres in 2021, worth Rs. 80 lakhs. Since most plantations are still relatively new, notable production increases are anticipated starting in 2022. Farmers have also made money by selling other growers planting material and dried lavender flowers. In Jammu Division, a significant contribution has been made by the CSIR-Aroma Mission, which has given more than 500 farmers access to over 8 lakh high-quality lavender plants at no cost, spanning more than 140 acres. Facilities for distillation and technical advice were also given in this support.

Lavender production is more lucrative than other crops grown in the region due to their use in the food flavouring, aroma, and cosmetic industries. The Market Demand for lavender oil was estimated to be worth US$11,579.5 million by the end of 2022. The market demand for lavender oil is primarily driven by the United States, Germany, Japan, and China. By the end of 2032, it is anticipated that the global market for lavender oil will exceed US$ 18,861.5 million. By 2022, the market for lavender oil in India will expand at a CAGR (Compound annual growth rate) of 5.5%.

The Indian government aims to make India a net exporter of lavender oil through its outreach efforts to the CSIR's Indian Institute of Integrative Medicine. A comparative analysis was done between Bulgaria and India. The results showed that there has been a constant increase in production in Bulgaria in accordance with the data in Table A1 from the appendix. From 2012 to 2016, the cultivation of lavender increased from 45 to 280 metric tonnes, respectively. However, the same production decreased from 2016 to 2017. The 2017 lavender crop report states that the dry summer of 2016 and the heavy rains and harsh winter conditions in 2017 added to the low outcome of the lavender harvest. So, the combined effect of less production and short supply resulted in the demand going up along with substantial increase in the Bulgarian lavender oil price indices from 81.2 to 98.5. Similarly, for India, from Table A2 in the appendix, there has been uniform progress from 2% to 35% of the production of lavender oil from lavender farming. There has been a drastic increase from 26% in 2016 to 35% in 2017. It should be noted that this is due to the introduction of of the Purple Revolution in 2016.

From Table A3 of appendix, for Indian exports, the export revenue increased constantly over the years (2014-2021), i.e. from 84 to 102 million USDs, while the export volume experienced a sudden hike in 2016 (highest recorded 65 metric tonnes), which was due to the launch and promotion of the Aroma Mission in the same year. For the next two consecutive years, the production diminished significantly; however, during COVID and post – COVID, uniformity was maintained. For Bulgarian exports, the revenue value fell drastically from 18 to 4 million USDs over the same years, and the export volume has been quite irregular as well. This is assumed to be due to the emergence of certain competitor countries in Europe, particularly.

For imports, in Table A4 of appendix, it is noteworthy that India imports more in volume than Bulgaria year-wise. Some industries demand a specific quality of lavender oil that is much different than the indigenous one, due to which the import volume for India increased chronologically for the years whereas it reduced on the Bulgarian aspect. Similarly, the import value for India has been increasing from 10 to 54 million USDs, and for Bulgaria it's been reducing, but it demonstrated an increment just in the year 2021.

Bulgaria has always been among the world's top producers of lavender, and since 2012, it has been the world's leading producer of lavender[1]. Factors adding to its growth are an increase in area of cultivation, as its lavender farms have grown to encompass 18000 hectares (69 square miles), up from less than a fifth of that area a decade earlier, and affordable labour. India too has been expanding its area of cultivation. According to EU statistics, Bulgaria has the lowest labour costs per hour in the European Union, at €6.00 ($7; £5.47). By comparing labour cost indexes, India's labour cost is still cheaper than that of Bulgaria as of 2021. As a result of larger harvested areas and a higher average yield per acre of 469 tonnes in Bulgaria, production increased by 23.6 percent in 2021. India, on the other hand, produced 85,623 tonnes of lavender in the previous year. Due to the undeveloped state of the cosmetics business in Bulgaria, 99% of the country's lavender production is currently exported, mostly to Germany, France, and Austria. Lavender oil is still mostly consumed in the

United States of America. To fulfil the rising demand, new market entrants may find chances if Bulgaria moves a larger portion of its output for domestic consumption."

5. LIMITATIONS

The lack of accessibility to data available on official Government Portals and the absence of formal institutions working to gather and maintain the databases, foreign investors and foreign countries who might be interested in investing in the growing lavender startup culture of India, shall be sceptical. Another noticeable drawback is about the quality; it is something that has to be checked and monitored to make effective decisions. A product of poor quality or a diluted form of lavender oil would be suggested by a low concentration of the total volatile organic compounds. In this context. In India, however, there are no such measures taken to assess the quality and to examine whether the differences in the quality of exports and imports exist.

Through the sources, the government's policy implemented as part of the Aroma mission was successful, but there is insufficient evidence and data to support it. The authorities have not measured the impact of their policy, and even if they have, it hasn't been updated or maintained to determine the significance of its success. In light of this, it would be incorrect to refer to the change as a revolution, especially if it was limited to a small region. Lavender cultivation continues to be unorganised, and private farmers sell their produce through private networks. Lavender oil prices and market linkages have not yet been regulated by the government.

The lack of distillation facilities in close proximity to farmers' farms is concerning. They can only extract oil in the CSIR - IIIM's distillation units, which are far from their farms. According to the farmers, the authorities ought to install distillation machines in each KVK (Krishi Vigyan Kendra) Center. Growers frequently lament the loss of the flowers' aromatic qualities when they are transported over long distances for extraction. If they grow lavender on a large scale on their farms and fields, farmers worry that they will lose money. Given that there is no functional flower mandi, they have no stable source to sell produce. They are not provided with a facility by the government, nor is there a viable strategy for when they can sell their produce.

6. POLICY RECOMMENDATIONS

Startups and farmers selling lavender must be encouraged by the government by granting them incentives, loans, and supporting lavender production. An increase in publicity by advertising and popularising the purple revolution in Kashmir would help increase sales within India.

Facilities containing distillation units used to extract lavender oil could be constructed and made accessible to the farmers, as currently the only available distillation units are at CSIR-IIIM. Technology pertaining to quality checks could be funded.

Transportation of crops, specifically lavender, must not be influenced by geopolitical factors. Increased research and development into the uses of lavender and technology used to create lavender products could be funded.

7. CONCLUSION

We can infer from the findings stated in the analysis above that the scope for the lavender market in India is huge; however, the Purple Revolution in its capacity has been very restrictive, mainly due to lack of publicity. According to the fast-paced development noticed so far, it can be concluded that lavender and its parallel products' cultivation will play a major role in transforming the shape[1] of the Indian agro - economy. The hypothesis has been accepted. The Purple Revolution, which was introduced so recently, has proved to be successful. Lavender shall also portray itself as a major cash crop like cotton.

Similarly, through the findings and analysis conducted for Bulgaria, we can observe that it has an upper hand than India due to various favourable factors in its control. However, certain geopolitical relations and quality assessment of the product influence the import decisions of the countries. Due to the rising demand for lavender and its products, the purple revolution will prove to be extremely profitable to India and is capable of adding India to the global lavender market in the upcoming years while simultaneously improving employability and adding to the nation's economic growth.

APPENDIX

Table A1: *Lavender oil production data : Bulgaria*

Year	Production (in metric tonnes)
2012	45
2013	120
2014	140
2015	200
2016	280
2017	200

Source: IOSR (2021)

Table A2: *Lavender oil production data : India*

Year	Production (in metric tonnes)
2012	2
2013	5
2014	9
2015	23
2016	26
2017	35

Source: IOSR (2021)

Table A3: *Export Data : Bulgaria and India*

	Bulgaria		India	
Year	Export value (in million USD))	Export volume (in metric tonnes)	Export value (in million USD))	Export volume (in metric tonnes)
2014	18.46	18.04	84.74	53.77
2015	6.76	6.82	74.07	51.65
2016	7.11	6.9	77.25	65.86
2017	9.95	10.25	76.51	48.23
2018	6.12	5.9	77.41	48.85
2019	7.13	7.82	91.32	54.54
2020	4.28	4.5	78.93	57.03
2021	4.87	3.42	102.48	57.89

Source: Tridge (2021)

Table A4: *Import Data : Bulgaria and India*

	Bulgaria		India	
Year	Import value (in million USD))	Import volume (in metric tonnes)	Import value (in million USD))	Import volume (in metric tonnes)
2014	19.7	13.95	10.79	9.37
2015	16.23	13.55	6.19	5.66
2016	14.39	13.13	16.63	11.09
2017	16.3	12.03	9.93	5.27
2018	14.6	11.03	21.31	15.12
2019	12.9	11.64	23.44	20.79
2020	10.06	7.7	25.96	20.91
2021	18.22	11.49	54.05	33.02

Source: Tridge (2021)

References

1. Avramov, Z. 2022. "Study of Sudden Decline of Lavender in Bulgaria Caused by 'Candidatus Phytoplasma solani'." *Bulgarian Journal of Crop Science.* https://www.researchgate.net/publication/359056659_Study_of_Sudden_Decline_of_Lavender_in_Bulgaria_Caused_by_'Candidatus_Phytoplasma_solani'_Bulgarian_Journal_of_Crop_Science_ISSN_2534-9848.

2. Bonchev, E. 2017. "2017 Lavender Crop Report." *Enio Bonchev*. https://www.eniobonchev.com/events/newsprojects/2017-lavender-crop-report/.

3. Agroberichtenbuitenland. 2019. "Bulgaria is the World's Largest Producer of Organic Rose and Lavender Oil." https://www.agroberichtenbuitenland.nl/actueel/nieuws/2019/07/19/bulgaria-is-the-world%E2%80%99s-largest-producer-of-organic-rose-and-lavender-oil.

4. International Trade Administration. 2024. "Bulgaria - Agricultural Machinery and Equipment." https://www.trade.gov/country-commercial-guides/bulgaria-agricultural-machinery-and-equipment.

5. USDA. 2020. "Bulgaria: Organically Grown Lavender Volume Almost Doubles in 2 Years." 2020. *Floral Daily*. https://www.floraldaily.com/article/9195956/bulgaria-organically-grown-lavender-volume-almost-doubles-in-2-years/.

6. Choudhary, B. C. 2021. "A Review of World Lavender Oil Markets and Lessons for Turkey." *International Journal of Innovative Research in Computer Science & Technology 9 (4)* https://www.ijircst.org/DOC/19-ugc_21_3534_v3.pdf.

7. ClearIAS Team. 2022. "Purple Revolution and Aroma Mission." https://www.clearias.com/purple-revolution-aroma-mission/.

8. Council of Scientific and Industrial Research. 2023. https://iiim.res.in/wpcontent/uploads/2023/12/IIIM-Jammu-AR-2020-21_14.11.2023-2.pdf.

9. Gairola, S. 2022. "Purple Revolution: Blooming Business of Lavender." *Yojana*. https://www.researchgate.net/publication/363087687_Purple_Revolution_Blooming_Business_of_Lavender.

10. Giray, F. H. 2018. "An Analysis of World Lavender Oil Markets and Lessons for Turkey." *Journal of Essential Oil Bearing Plants.* https://www.researchgate.net/publication/331664982_An_Analysis_of_World_Lavender_Oil_Markets_and_Lessons_for_Turkey.

11. Global Industry Analysts, Inc. 2020. "Lavender Oil: Global Strategic Business Report." https://www.researchandmarkets.com/reports/5140581/lavender-oil-global-strategic-business-report.

12. Future Market Insights. n.d. "Lavandula Oil Market." https://www.futuremarketinsights.com/reports/lavandula-oil-lavender-oil-market.

13. GlobeNewswire. 2022. "Lavender Oil Market 2022-2027: Growth, Size, Trends, Share, Competitive Analysis, Types and Forecast to 2027." https://www.globenewswire.com/news-release/2022/04/29/2432602/0/en/Lavender-Oil-Market-20222027-Growth-Size-Trends-Share-Competitive-Analysis-Types-and-Forecast-to-2027.html.

14. Persistencemarketresearch. n.d. "Lavender Oil Market." https://www.persistencemarketresearch.com/market-research/lavender-oil-market.asp.

15. Volza. n.d. "Lavender Oil Suppliers in Bulgaria: 45 Active & Genuine Lavender Oil Manufacturers & Exporters Directory." https://www.volza.com/p/lavender-oil/manufacturers/manufacturers-in-bulgaria/.

16. Mihala, L. 2020. "The Sweet Smell of Success: How Bulgaria Took the Lead in Lavender." *BBC*. https://www.bbc.com/news/business-53493550.

17. Nabi, W. 2022. "Lavender Cultivation Pushes Up J&K Farmers' Incomes 4 to 5 Times." *30stades*. https://30stades.com/2022/06/24/lavender-cultivation-pushes-up-jammu-kashmir-farmers-incomes-4-to-5-times/.

18. Press Information Bureau Delhi. 2021. "Dr. Shekhar Mande, DG-CSIR, Visits J&K and Takes Stock of CSIR's Lavender Cultivation at Pulwama." https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1734866.

19. Press Information Bureau Delhi. 2021. "Union Minister Dr. Jitendra Singh Proposes Integrated Aroma Dairy Entrepreneurship for Jammu & Kashmir to Augment the Income of Farmers." https://pib.gov.in/PressReleasePage.aspx?PRID=1756729.

20. Press Information Bureau Delhi. 2022. "Union Minister Dr. Jitendra Singh Says, Success of 'Purple Revolution' has Shifted Focus to Agri-tech Start-ups." https://pib.gov.in/PressReleseDetailm.aspx?PRID=1836241.

21. IndiaScience. n.d. "Purple Revolution Empowering Rural Women." https://www.indiascience.in/videos/purple-revolution-empowering-rural-women-e.

22. Council of Scientific and Industrial Research-Indian Institute of Integrative Medicine. n.d. "Purple Revolution of Jammu and Kashmir: A Game Changer." https://iiim.res.in/a-six-month-training-program-on-design-and-manufacture-of-leather-goods-and-garments-was-inaugurated-at-csiriiim-branch-srinagar-3/.

23. Signup Trending Nature. 2021. "Lavender Farming Profit Per Acre | Lavender Cultivation in India." https://signuptrendingnature.com/lavender-farming-profit-per-acre-lavender/.

24. Council of Scientific & Industrial Research. 2020. "Annual Report." https://iiim.res.in/wp-content/uploads/2021/02/Final-Copy-of-AR-2019-20.pdf.

25. Tridge. 2021. "Overview of Lavender Oil Market in Bulgaria." https://www.tridge.com/intelligences/lavender-oil/BG.

26. Tridge. 2021. "Overview of Lavender Oil Market in India." https://www.tridge.com/intelligences/lavender-oil/IN.

27. Wani, F. 2022. "Aroma of the Purple Revolution." *The New Indian Express*. https://www.newindianexpress.com/good-news/2022/jun/19/aromaof-the-purple-revolution-2467174.html.

28. Wani, N. Akhter, and Jangale, B. Haribhau. 2021. "Economic Impact of Lavender Plant Farming in District Budgam of Jammu and Kashmir." *IOSR Journal of Humanities and Social Science 26 (2): 54.* https://www.iosrjournals.org/iosr-jhss/papers/Vol.26-Issue2/Series-6/H2602065154.pdf.

29. Y, S., Zayova, E., and Krastev, S. 2004. "Vegetative Propagation of Lavender (Lavandula vera V.) by Using Green Cuttings." *Bulgarian Journal of Agricultural Science.* https://www.researchgate.net/publication/305904620_Vegetative_Propagation_of_Lavender_Lavandula_vera_V_by_Using_Green_Cuttings.

30. ИНФОСТАТ - Национален статистически институт. n.d. "Заявка справка." https://infostat.nsi.bg/infostat/pages/reports/query.jsf?x_2=1737.