

Floriculture: Demand and Scope in India

Jahanvi Sharma*

Final Year Student, B. Sc Agriculture, TMU, Moradabad, U.P., India

ABSTRACT

Floriculture has a traditional farming origin in India, which has lately been realised as having an enormous potential to generate revenue, employment among farmers, and contribute to economic growth. In the last few years, it has arisen as one of the money-making agri-business in India and worldwide, resulting in improved living and increased realisation among agriculturists. Even across the nation, the demand of floriculture products has increased many folds in various sectors. This paper shall highlight the present status of the floriculture industry and the industry's challenges despite its enormous hidden potential.

Keywords: Agribusiness, Agriculture, Floriculture.

Adhyayan: A Journal of Management Sciences (2020); DOI: 10.21567/adhyayan.v10i2.8

INTRODUCTION

Floriculture is an evolving branch of horticulture that deals with the farming, processing, and marketing of ornamental plants that are the landscaping of geographical areas, and maintenance of gardens so that the surroundings may seem visually attractive.

Floriculture includes yearly (seasonal), periodic and constant ornamentals, such as cacti and other succulents, bromeliads, trees, shrubs, climbers, bulbous plants, lawn, and ornamental grasses, bamboos, orchids, palms, cycads, foliage, bedding, jar, and household plants, cut and loose flowers, fillers, leaves, seed and bulb creation of ornamentals, dry flowers or plant parts, and other value-added products, such as extraction of essential oils, edible pigments, and their marketing vis-a-vis making and maintenance of gardens.

The Floriculture Industry in India embraces flower production and trade, nursery and potted plants, seeds and bulbs, nursery, herbal rental services, propagation through tissue culture, and essential oils extraction.

In today's world, the demand for flowers is increasing thus has provided a new horizon for commercial agriculture.

The floriculture industry mainly deals with cut flowers, potted plants, seeds bulbs, tubers, rooted cuttings, and dried flowers or leaves. The international market's significant floricultural harvests are cut flowers like rose, carnation, chrysanthemum, gerbera, gladiolus, gypsophila, Liatris, Nerine, orchids, Achilleas, Anthurium, tulip, and Lilies. Floriculture crops like gerberas, carnation, etc. are grown in greenhouses. The open

Corresponding Author: Jahanvi Sharma, Final year student, B. Sc Agriculture, TMU, Moradabad, U.P., India, e-mail: jahanvisharma127@gmail.com

How to cite this article: Sharma, J. (2020). Floriculture: Demand and Scope in India. *Adhyayan: A Journal of Management Sciences*, 10(2):59-63.

Source of support: Nil

Conflict of interest: None

park crops are chrysanthemum, roses, gaillardia, lily, marigold, aster, tuberose, etc.

FLORICULTURE INDUSTRY IN INDIA

According to a report of the Agricultural and Processed Food Products Export Development Authority (APEDA)

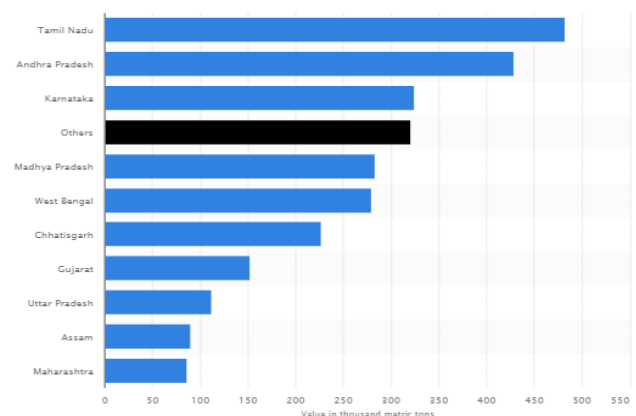


Figure 1: Floricultural production in selected states and union territories in India in FY 2018 (Source: <https://www.statista.com/statistics/1039778/floriculture-production-by-state-india/> dated 22/09/2020)

approx, 249 thousand hectares of the area were under cultivation in floriculture in 2015-16 (as detailed in Table 1) and the Indian floriculture Industry stands 2nd in terms of the world's production of floriculture produce after China. This includes the production of flowers which was estimated to be 1659 thousand tonnes of loose flowers and 484 thousand tonnes of cut flowers in 2015-16.

The Floriculture market of India was worth INR 157 Billion in 2018 and may reach INR 472 Billion by 2024, it is growing at a CARG of 20.1% during the years 2019-2024.

The major states of flower production in India are considered to be Maharashtra, Karnataka, Andhra Pradesh, Haryana, Tamil Nadu, Rajasthan, and West Bengal (As Shown in Figure 1).

Major Flowers Yields of India

Indian floriculture industry embraces flowers such as Rose, Tuberose, Gladiolas, Anthurium, Carnations, Marigold, Jasmine, Hibiscus, Bougainvillea, etc. Cultivation of flowers can be done in various forms like farms, poly houses, and man-made greenhouses.

- Among all, Rose is the major "cut flower" grown all over the country. The larger fraction of the floriculture zone is used for growing scented rose, usually local varieties parallel to the Gruss en Tepelitz, the old favorite to be traded as loose florals. These are cast-off for gifts at places of devotion, for the extraction

Table 1: Area and Production of flowers during the last two decades in India

Year	Area(ha)	Production (MT)
2001-02	106000	535000
2002-03	70000	735000
2003-04	101000	580000
2004-05	118000	659000
2005-06	129000	654000
2006-07	144000	880000
2007-08	166000	868000
2008-09	167000	987000
2009-10	183000	1021000
2010-11	191000	1031000
2011-12	254000	1652000
2012-13	233000	1729000
2013-14	255000	2297000
2014-15	248000	1658000
2015-16	278000	1526000
2016-17	306000	1699000
2017-18	342000	1760000
2018-19	339386	1997381

of vital oils, and used in coronets. For cut flower use, the old rose varieties like Queen Elizabeth, Super Star, Papa Meilland, Christian Dior, Eiffel Tower, Kiss of Fire, Garde Henkel, First Prize, etc. are still prevalent.

- In the last few years, flower production for export purposes has increased which includes the latest varieties like First Red, Grand Gala, Konfitti, Ravel, Tineke, Sacha, Prophyta, Pareo, Noblesse, etc. are also being grown commercially.
- Gladiolus is the next most vital cut flower crop in India. Earlier, it grew in moderate areas, and its rising was controlled to the hilly areas, mostly in the north-eastern region, which still continues to hoard the major planting. However, with enhanced agronomic techniques and well management, the northern grasslands of Delhi, Haryana, Punjab, Uttar Pradesh, as well as Maharashtra and Karnataka have occurred as the major shares for production of gladiolus.
- Tuberose, a very general cut flower yield in India is full-grown mainly in the eastern part of the country i.e. West Bengal, and also in northern plains and parts of the south. Both solo and double flower varieties are similarly popular. Tuberose flowers are also vented loose in about areas for making garlands and wreaths.
- The other leading "cut flower" piece is the orchid. Its production is limited mostly in the north-eastern hill areas and parts of Kerala and Karnataka's southern states. The main class grown are Dendrobiums, Vanda, Paphiopedilums, Oncidiums, Phalaenopsis, and Cymbidiums.
- Among the dated harvests comes the Marigold, which is grown all over the country. In most stocks of the country, only resident varieties are grown up for generations. African Marigolds occupy an extra area as compared to the minor flowery French categories.
- Jasmine flowers in this recent trail come under slack flowers and are used in garlands and "Veni" (flower ornament for hair used by women). Jasmine's major zones are Tamil Nadu, Karnataka in the South, and West Bengal in the East. The varieties are mainly improved clones of *Jasminum grandiflorum*, *J. auriculatum*, and *J. sambac*. The chrysanthemum, predominantly the white varieties, is more in demand as "loose flowers" during the autumn season between October and December when other flowers like jasmine and tuberose are not accessible for religious purposes. Amid other traditional plants grown in big areas is Cassandra in southern conditions of Tamil Nadu, Karnataka, and Andhra



Pradesh and aster in Maharashtra.

Many of India's southern states like Maharashtra, Karnataka, Andhra Pradesh, Haryana, Tamil Nadu, Rajasthan, West Bengal (Indian States) have emerged as major floriculture centers. India has few major Agriculture Export Zones (AEZ). Major among them are as mentioned in Table 2.

The Demand of Flowers in India

The Indian Flower gardening market was worth INR 188.7 Billion in 2019. Floriculture is also known as flower farming, raises the farming of flowering and ornamental plants. Though flowers have always been a vital part of the Indian culture and were cultivated for several purposes ranging from artistic to social and holy purposes, the saleable floriculture business has been of recent origin. Strong growth in the demand for cut and loose flowers has completely transformed floriculture as one of the imperative commercial trades in Indian agriculture. Looking forward, IMARC Group thinks the Indian Floriculture market to display strong growth trends during 2020-2025.

The metros and the higher Indian cities presently represent major clients of flowers in the country. As an upshot of increasing urbanization and influence of western cultures, "saying it with flowers" is flattering quite general on some occasions such as Valentine's Day, birthdays, festivals, anniversaries, marriages, farewell parties, religious rituals, etc. Consumption of flowers is further expected to rise with drifts of urbanization and the effect of western culture in the approaching years.

Apart from beautiful and decorative purposes, a considerable amount of flower consumption also occurs in work applications. This includes flavors, scents, natural color, drugs, etc.

The major Indian markets for flowers are situated in the states, which produce large quantities of flowers, but Kerala is an exception to this, as it is one such state that has a large market without any production. Some states in Southern India have many big markets. The major markets in terms of trading are the peninsular and east India. The major markets in peninsular India are Coimbatore, Madras, and Madurai in Tamil Nadu; Trivandrum and Cochin in Kerala; and Bombay and

Pune in Maharashtra; Mysore, Bangalore, and Dharwad in Karnataka; Hyderabad and Vijayawada in Andhra Pradesh. Mumbai has three large markets. Kolkata in the east is also a major market hub. In the north Lucknow, Kannauj and Delhi are among the bigger market for flowers. In spite of a long custom of Agriculture and Floriculture, India's share in the global market is very small. During the last decade, taking advantage of the government's incentives, a number of Floriculture firms were established in India for producing and exporting flowers to the developed countries.

Status of Floriculture Export from India

The Government of India first acknowledged the need for diversification of the horticulture sector in the mid-1980s by aiming at investment in this sector. The floriculture sector improved income by generating employment, increased productivity, and promoting exports for agriculturists. Consequently, floriculture moved from rural traditions and emerged as a commercial hub.

The floriculture industry is a growing industry in the country. This sector, according to international trade classification, includes (a) bulbs, tuberous roots, and tubers (b) other live plants (c) cut- flowers and flower buds, dyed, bleached, fresh dried, impregnated or otherwise prepared, and (d) foliage, branches and other parts (other than flowers and buds) of bushes, mosses, trees shrubs, and other plants lichens and grasses, being goods of a kind suitable for bouquets or ornamental purposes, bleached, dried, fresh, dyed, impregnated or prepared.

During the 12th Five Year Plan (2012-17), the department concentrated on the establishment of the infrastructure facilities, providing of better-quality germ plasma, acceptable market support, re-modeling, awareness about pre-and post-harvesting technologies, growth, and restoration of parks and gardens besides bringing enhancements in equipment for prompt and scientific maintenance of parks under floriculture zones.

Despite that India's share in world trade was only 0.61% in the year 2014 and 0.89% in 2015 according to the Associated Chambers of Commerce and Industry

Table 2: Agri-Export Zone (AEZ) of India (Flower exporting zones)

Karnataka	Bangalore (Urban), Bangalore (Rural), Kolar, Tumkur, Kodagu and Belgaum
Uttarkand	Dehradun, Pantnagar, Udham Singh Nagar, Nainital and Uttarkashi
Maharashtra	Nasik, Sangli, Sholapur, Satara, Ahmednagar
Tamil Nadu	Dharmapuri

Source: National Horticulture Board (NHB) Publication

of India (ASSOCHAM). The export during the pre-covid period in 2019-20 had been of 16,949.37 MT of floriculture products to the world for Rs' worth. 541.61 Crores/75.89 USD Millions. There is a huge demand for Indian flowers overseas. India is majorly exporting the flowers in the following countries (detailed in Figure 2).

India's Floriculture market with a current growth rate of CARG 20.1% during the years 2019-2024 is expected to reach a worth of INR 472 Billion by 2024. According to CNBC, the biggest demand from Europe and the UK is for Indian roses, grown in Pune and Bengaluru. According to research and studies by various organizations including IMARC, the Indian floriculture market was expected to grow to Rs 47,200 crore by 2024.

Challenges before floriculture export from India

There are many impediments related to floriculture exports which keep India's share in world trade negligible.

Competition: The competition in the international arena has been increasing with new African countries' entry in the global trade. Besides, many Asian countries are also emerging as competitors in the export market, such as China, Nepal, Sri Lanka, and Pakistan.

Quality of produce: The main hurdle is the quality of flowers, low level of product diversification, less differentiation, vertical integration and innovation and challenges associated with quality and emerging environmental concerns. There are all together six agro-export zones in 6 different states in the country. Despite

that, there exist several issues in export of floriculture produce. Meeting the international quality standards requires the adoption of modern technology and a protected environment, which are very expensive in India.

Lack of infrastructural support: Another issue related to India's export is a shortage of air freight capacity during pick period leads to a backlog at the airports. This is a serious disadvantage for perishable products like fresh flowers. Air cargo handling facility and cold storage facilities for perishables are almost non-existent at international airports.

Challenges in Marketing activities: Marketing of the flower is also an important aspect that adds to the produce's net profit. There are various stages in marketing of floriculture produce i.e. assembling, grading, packaging and transportation, there are various marketing channels from producer to consumer. Lack of centralised government level policies and organised sector acts as a hurdle.

Scope of Floriculture

The scope of floriculture is rising exponentially following the trends of IT Industry all across the world. Floriculture has never been a business commodity only but a recurrent source of income to any country. Floriculture today has adopted a very dynamic marketing trend. All private banks, hospitals, corporate houses, and event management companies use flowers in their offices for aesthetic purposes. In addition these individuals are adopting the practice of using flowers for their household weddings. Even filmmakers, political parties,

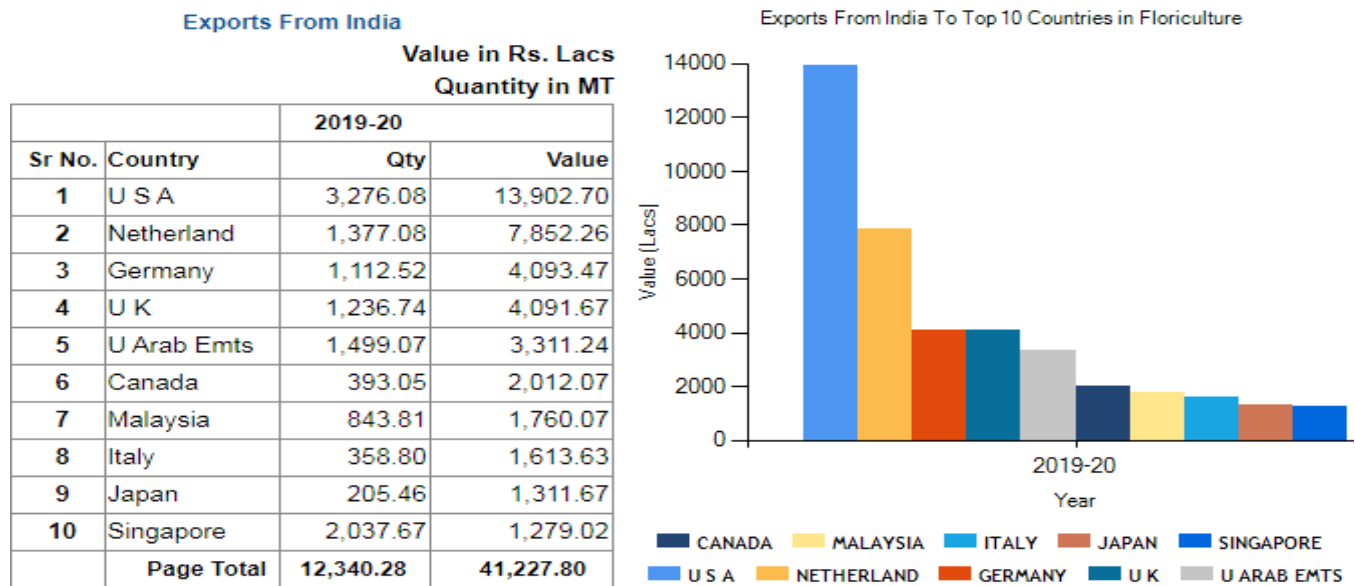


Figure 2: Value of floriculture products exported from India in financial year 2020, by leading destination (in million Indian rupees) (Source: <https://www.statista.com/statistics/1040968/value-of-floriculture-exports-from-india-by-country/>)



exhibition and conference organisers are consuming flowers for decoration in a big way.

The International floriculture market is growing 8-10 % annually. On average, the International requirement is around Rs. 90,000 crore/year while demand at the domestic market is at 20-25 %. Hence, the scope to develop in the floriculture industry in India is boundless. The efforts taken by Indian government in this direction includes:

- Setup of formal infrastructure facilities for floriculture industry in few major cities like New Delhi, Mumbai, Kolkata, Chennai, Bengaluru, Pune etc.
- APEDA being given responsibility to provide financial assistance for various activities connected with export of floriculture products.
- Provision of easy bank financing for technology-driven floriculture farmers.
- 100 percent export-oriented units (EOU's) are located in and around places like Hyderabad (Andra Pradesh), Bengaluru, Hosur, Doddaballapur, Devanahalli (Karnataka) in South and Gurgaun (Haryana) in North, Lonavala and Pune (Maharashtra) in West.
- All EOU's have been allowed to sell 50 percent of their produce in domestic boundaries too.
- 100% tax exemption has been given on all equipment, implements and raw materials used in greenhouses.
- The rules and regulations associated with imports and exports have been eased out.
- Singapore has been made the nearest International standard flower auction center for all Indian exporters' support.
- APEDA and GOK have established four flower auction centers, including one in Bengaluru, Noida (UP), Mumbai and New Delhi.
- APEDA also has setup a marketing centre at Aalsmeer (The Netherlands) to promote Indian produce.

CONCLUSION

Despite of immense export prospects in the future, the yield and revenue generated by the Indian floriculture industry has not been heartening over years. Floriculture products possess 25-30 time more capability to attract foreign exchange earning in comparison to cereals and

other agricultural/horticultural products. Floriculture is capable of attracting and retaining large number of progressive farmers/ entrepreneurs. Due to ample sunlight and optimum temperature during winter, it does not require artificial lighting or heating for greenhouse production of cut flowers. The industry has continuously been facing several challenges starting from the production phase in terms of small size land holding size, unavailability of basic resources, semiskilled or skilled manpower for harvesting, and post-harvesting techniques. The government must work out centralized and state-level policies for the development of roads and infrastructure for floriculture units, electric supply, water, cold storage at airport, and customs officials' training for faster processing. The government must also lay down some standard policies and include this in their areas of focus for the encouragement of marginal farmers to get facilitated by easy raw material and suppliers.

REFERENCES

- Datta, S. K. (2019). Present Status of Research on Floriculture in India. *LS: International Journal of Life Sciences*, 8(2), 71-93.
- Misra, D., & Ghosh, S. (2016). Growth and export status of Indian floriculture: A review. *Agricultural Reviews*, 37(1), 77-80.
- Narasimham, N. V., & Kishor, N. (1997). Floriculture Exports: Potential and Challenges. *Foreign Trade Review*, 32(3), 42-57.
- Ninama, A. P., Sipai, S. A., Khadayata, K. G., & Patel, P. C. (2016). Floriculture in India: problems and prospect. *Advances in Life Sciences*, 5, 1150-1153.
- Shelke, A. (2014). Commercial floriculture industry in India: Status and prospects. *International Journal of Management and Information Technology*, 10(2), 1837-1843.
- Board, N. I. I. R. (2005). *Cultivation of fruits, vegetables and floriculture*. NIIR PROJECT CONSULTANCY SERVICES.
- Randhawa, G. S., & Mukhopadhyay, A. (2001). *Floriculture in India*. Allied Publishers.
- Sharma, L. R., Nadda, A. L., & Sharma, P. (1997). Export Oriented Floriculture in India Status, Constraints and Strategies. *Indian Journal of Agricultural Economics*, 52(3), 637.
- <http://apeda.gov.in/apedawebsite/>