Floriculture Business in India: A SWOT Analysis

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ABSTRACT

Flowers are the integral part of the social fabric of human life as the essence and fragrance of flowers has been enticing human being since time immemorial. Indian mythology has given a great importance to the flowers and its usage as religious, aesthetic, decorative, cosmetic and medicinal purpose. Floriculture, or flower farming is a discipline of horticulture concerned with the cultivation of flowering & ornamental plants for gardens & for floristry, comprising the floral industry. It is a fast emerging and highly potential industry in India. It has emerged as a lucrative profession with higher potential for returns compared to other agricultural crops. With the growing importance of flowers in the life style of Indian people, due to the fusion of the western culture and increased standard of living and the growing export potential for flowers has influenced many Indian companies to consider floriculture as a good business prospect. In recent decades, the global demand for flowers has grown considerably. This growth in the market demand and its diversification value has attracted increasing numbers of developing countries to the global fresh flower trade. The paper is an attempt to study the present and future potential of floriculture cultivation and exports in India taking into consideration the measure needed to promote this lucrative industry. This paper represents the SWOT analysis of floriculture industry in India and their future prospects.

Key Words: SWOT, ASSOCHAM, NHB, APEDA, NABARD.

INTRODUCTION:

Floriculture can be defined as a specialized branch of horticulture which deals not only with the cultivation of flowers, foliage, climbers, trees, shrubs, cacti, succulents etc. but also with their marketing and production of value added products from them. Floriculture crops include bedding plants, houseplants, flowering garden & pot plants, cut cultivated greens and cut flowers. Bedding & garden plants consist of young flowering plants (Annuals & Perennials) and vegetable plants. It is considered to give serendipity- a change in the attitude towards way of living. The flowers are grown in cell packs (in flats or trays), in pots or in hanging baskets, usually inside a controlled environment and sold largely for gardens & landscaping. The flowers are sold in two forms: one separate flowers stalks or dozens without any packing & processing and another form in which cut flowers are sold to the customers with an arrangements like: bouquets, flower vase arrangement, wedding arrangements, wreaths etc.

Objectives:

The present study has examined the following objectives:

- To study the importance of floriculture in India.
- To study the development of floriculture in India.
- To analyse the trend in area & production of floriculture in India.
- To study the trends of Exports of floriculture in India.
- To study the role of supporting agencies in floriculture sector.
- To suggest policy measures for the betterment of floriculture business by SWOT Analysis.

Data Sources:

This paper is based on Secondary data. Data are collected from National Horticulture Board, Agricultural and Processed Food Product Export Development. Information has also been collected from Economic Survey, Various Reports and different Web-Sites.

Indian history of floriculture:

India has a long history of flowering plants. In the era of Mahabharata, there was famous tress named 'KADAMBA', which associated with lord Krishna. Vatsyana (300-400) described four kinds of gardens, which were made for the queens, kings, courtiers and ministers. Famous poet Banabhatta described the number of flowering plants in his famous book 'Harsh Charita'. Status of gardening had mentioned in Ramayana written by Valmiki and Tulsidas. When Aryans came in India about 1600 B.C. the country was called as Aryavrta, which means the country of lotus and sunshine because the lakes were studded with lotus. The history of systematic gardening in India is as old civilization of Indus of Harappa, which existed between 2400 B.C. There are many evidences found that trees and ornamental plants were associated with the Harappa civilization. Grand Trunk Road (G.T. Road) from Lahore to Calcutta made by Sher Shah Suri and planted shady trees along both sides of the roads. After globalization, modern trends are transferring from one nation to another, though the new trends arrive in India. Therefore, last two decades there has been raising 'Commercial Floriculture' in India.

General Importance of Flower:

As floriculture deals with the culture of flowers and ornamental plants, it has great importance in our daily life as well as national economy.

- Flower help getting out of illness through psychological enchantment.
- Flowers gardens increase beauty of the house or an institution.
- > Scent and perfumes are extracted from the fragrance of flower like rose water.
- It is the source of incentive to the poets and writers.
- Flower is a national symbol of a Country. Lotus (Kamal) *Nelumbo nucifera* is the national flower of India.
- Flower increases the aesthetic sense of human being and satisfies demand of heart feelings.

Economic point of view:

Floriculture is a fast emerging major venture in the world, especially as a potential money-spinner for many countries in world. Many flowers and ornamental plants are being grown for domestic as well as for export market will provide more return area than any other agricultural crops. Extraction of essential oils and making of economic product like Gulkand is very useful. Presently more than 145 industries are involved in flower

production on commercial scale. Establishment of flower production & perfume industries can help solving unemployment problem to a large extent. About 248.51 thousand hectares area was under cultivation in floriculture in 2014-15. The country has exported 22086.10 MT of floriculture products to the world for the worth of Rs.548.74 crores /82.05 USD millions in 2016-17. A strong increase in the demand for cost and loose flowers has made floriculture as one of the important commercial trades in Indian agriculture. India is on the 18th rank with contributing 0.6 percent share in global floriculture trade. During the last decade, export increased at a CAGR of 4.33 percent. The domestic Indian Market is growing at the rate of 25 percent per year in the country as a whole. The strength of floriculture development in India is varied according to different agro-climate conditions in the country, availability of manpower and large demand for floriculture product in metropolitan cities.

Aesthetic point of view:

Scope for landscaping is considered as billion dollar earning industry in states which ultimately adds the monitory value of any properly. The wealth of any nation is linked with the health of its people. We can ensure the healthy development of our citizens, by providing them for open breathing places through bioaesthetic planning like in Chandigarh city and landscape gardening. Horticulture Therapy is the new dimension of horticultural science to heal the psychic debility and the science is to use garden, landscape plants, parts of plants, growing activity as tools to work. The bio-force of plants offer a permanent solution to the problems of Bio-force of human thus, bio aesthetic horticulture is emerging as a new occupational therapeutic tool to restore the lost rhythm and harmony back to human self or inner environment. It is being utilized in psychiatric hospitals, general hospitals, physical rehabilitation centre, prisons, schools & homes for elderly.

Social Point of View:

Flowers symbolize the purity, beauty, peace, love, adoration, innocence and passion etc. Hence, many flowers are used temperate countries during the winter season, when the demand is in peak because of the important winter festivals like Christmas, New Year and Valentine's Day. Labour cost is very low in India, nearly 10-15 times cheaper than that of similar employees in the Netherland, Israel and Japan. The Govt. of India has identified floriculture as "Extreme Focus Thrust Area" for export. With the implementation of GATT agreement European nations has brought down the import duty on floriculture products. The Govt. of India has set up the infrastructure for floriculture industry in major cities like New Delhi, Mumbai, Kolkata, Chennai, Bengluru & Pune etc. Easy Bank loan are available in hi-tech floriculture business. APEDA is giving financial assistance to some extent for various activities connected with export of floriculture products. Hundred percent tax exemption has given on implements/ raw materials used in green houses. Singapore is the nearest International Standard flower auction centre, helpful for Indian exports.

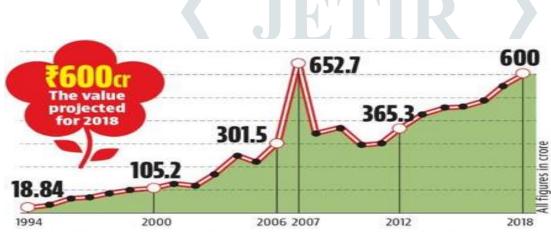
Development of floriculture in India:

Government of India has identified floriculture as a sunrise industry and accorded it 100% export oriented status. Owing to steady increase in demand of flower floriculture has become one of the important commercial trades in agriculture. Floriculture in India is being viewed as a high growth industry. The Liberlisation of industrial and trade policies paved the way for development of export-oriented production of cut flowers. The new seed policy had already made it feasible to import planting material of international varieties. It has been found that commercial floriculture has higher potential per unit area than most of the field crops and is therefore a lucrative business. The liberalized economy has given an impetus to the Indian entrepreneurs for establishing export oriented floriculture units under controlled climate conditions.

Indian floriculture industry reached INR 9000 crore in 2016-17. The Indian floriculture market was worth INR 157 Billion in 2018. The market is further projected to reach INR 472 Billion by 2024, growing at a CAGR of 20% during 2019-2024.

- ➤ Rose, Jasmine, Orchid, Glardlya, Carnations, Marigolds are important commercial flowers having total 7058149 cropped area under floriculture in 2016-17.
- ➤ It has been growing at CAGR 25% since last five year.
- Total production reached 2236000 MT in 2016-17 with share of loose flower almost 69%.
- United States, Germany, U.K., Netherland, Arabian Emirates are key export destinations for India.

According to, India's floriculture industry is growing at a compounded annual growth rate of about 40%. Open field cultivation and green house technique is useful to develop the floriculture business. Green house is one of the framed structures covered with transparent material in which crops can be growing under the conditions of controlled environment. In India, the cultivation in the plastic greenhouse is one of the recent origins. Area & production of flowers under both green house and open field cultivation observed increasing trends in India.



Source: Agriculture and Processed Food Products Export Development Authority (APEDA)

TABLE-1 State Wise Area and Production of Flower (Loose) 2017-18

S No.	States /UTs	Area (M.H.)	Production
1	Andhra Pradesh	25.7	429.0
2	Arunanchal Pradesh	0.0	0.0
3	Assam	5.1	33.9
4	Bihar	0.5	5.5
5	Chhattisgarh	13.2	47.5
6	Gujarat	20.4	152.2
7	Haryana	5.5	56.7
8	Himachal Pradesh	0.6	12.3
9	Jammu & Kashmir	49.6	29.7
10	Jharkhand	0.8	4.5
11	Karnataka	31.4	231.0
12	Kerala	38.2	0,1
13	M.P.	19.8	245.5
14	Maharashtra	5.5	29.1
15	Manipur	0.2	0.5
16	Meghalaya	0.0	0,0
17	Mizoram	0.2	0.0

	Total	324.0	1962.0	
29	Others	7.3	1.2	
28	West Bengal	26.8	74.9	
27	Uttrakhand	1.5	2.5	
26	Uttar Pradesh	21.2	46.4	
25	Tripura	0.0	0.0	
24	Telengana	3.7	17.9	
23	Tamil Nadu	34.2	482.5	
22	Sikkim	0.2	16.5	
21	Rajasthan	3.5	7.1	
20	Punjab	2.1	10.7	
19	Orissa	6.6	24.9	
18	Nagaland	0.1	0.0	

Source: Horticulture Statistics Division, Ministry of Agriculture & Farmer Welfare.

During 2017-18 floriculture covered an area of 49.6 Million hectares in Jammu& Kashmir, 38.2Million hectares in Kerala, 34.2 Million hectare in Tamil Nadu, 26.8 Million hectare in West Bengal and 25.7 Million hectare in Andhra Pradesh. This sector offers opportunities for generating income and employment especially for women. Noticeable advancements have been made in recent decades in flower production particularly in the production of cut flowers which have potential in terms of exports. The important flower growing states are Jammu & Kashmir, Kerala, West Bengal, Andhra Pradesh, Karnataka, Tamil Nadu and Uttar Pradesh. A major part of the area under flower cultivation is devoted to the production of Marigold, Roses, Jasmine and Tuberose etc.

Export of floriculture:

The government of India has identified floriculture as high export potential. Due to planning with target and facilities given by supporting agencies, export of floriculture has been increasing year by year. Export units are mainly concentrated around Pune, Nasik, Bengluru, Delhi, Gurugram, Coimbatore, Faridabad, Chandigarh, Lucknow, Chennai, Calcutta, Vadodara, Jalpaiguri and Amritsar. The major imports for Indian cut flower are Europe and Japan.

TABLE-2: EXPORT OF FLORICULTURE in year 2018-19

	EXPORT OF FLORICULTURE in 2018-19		
S.No	Country	Qty (MT)	Value (lakh)
1	USA	4038.07	14692.43
2	NETHERLAND	1518.92	7789.14
3	UK	1530.01	4470.63
4	GERMANY	1251.71	3938.55
5	UAE	871.24	3434.08
6	CANADA	878.99	2341.81
7	AUSTRALIA	250.53	1607.44
8	ITALY	403.24	1578.90
9	JAPAN	310.37	1574.58
10	MALASIYA	862.00	1539.92
	TOTAL	12915.08	42967.48

Source: Indian Horticulture Database, Ministry of Agriculture, Govt. of India

Value of exports of floriculture from India for the period of 2018-19 has exhibited in Table No.2. India exports flower largely to U.S.A, UAE, U.K., Netherland and Germany. In the year 2018-19 India exports the flowers with the value of 14692.43 lakh to U.S.A.,7789.14 lakh to Netherland and 4470.63 lakh to U.K. Value of total exports has increased. According to Indian Horticulture Database 2018-19, the quantity of Indian floriculture export was 12915.08 metric Ton and the total value of export was 42967.48 lakh rupees which shows positive trends in international market.

Government of India has considered floriculture industry as a fast growing industry and fully export oriented business in this decade. Due to continuous increase in demand for flower floriculture trade has become one of the most important commercial trades in horticulture as well as in agriculture. Floriculture in India is considered as a high growth industry, commercial floriculture is becoming an important from the export point of view.

Table-3: Area, Production and Productivity of Floriculture in India

Year	Area	Production	Productivity
	(In 1000 HA)	(In 1000MT)	
2007-08	166	868	5.2
2008-09	167	987	5.9
2009-10	183	1021	5.6
2010-11	191	1031	5.4
2011-12	254	1652	6.5
2012-13	233	1729	7.4
2013-14	255	2297	9.0
2014-15	249	2143	8.6
2015-16	278	2184	7.9

Source: National Horticulture Board Data Base 2017-18 & Economic Survey 2017-18.

Over the study period of years from 2007-08 to 2015-16 the area under floriculture crop has been increased which has shown in Table No.3. The area under floriculture was 1,66,000 hectares in 2007-08 where as it was 2,55,000 hectares in 2013-14 and it is witnessed for more than double in a decade. In 2015-16 it has 2,78,000 hectares as highest. If we see the decadal growth of area has improved in a rapid manner which indicates the positive sign in the sector of floriculture in India. Floriculture production has been increased from 8.68.000 tons to 2,18,4000 tons during the study of nine years.

Government incentives and schemes:

The Union Govt. has recognized floriculture as a thrust area for export and announced several concessions/incentives for its development in the country:

- > Zero import duty in Seeds, bulbs, cut on import duties for machinery, flower and tissue culture seed.
- ➤ The National Horticulture Board (NHB) have two major scheme: soft loan up to a maximum limit of Rs 1 crore advance for setting up infrastructural facilities like cold storage, pre-cooling units, packing and grading sheds, refrigerated transport etc.
- ➤ The loan facilities are available for the integrated projects involving production and disposal of floriculture products.

The concept of the scheme is to introduce improved varieties of flower of commercial importance, to intensify production of planning materials to introduce modern system of post harvest handling and to impart training

to farmers and field staff. Nine model centers with tissue culture facilities were set up in public sector in various state of India.

The role of supporting agencies:

It is inappropriate to discuss floriculture development knowing the role of supporting agencies such as NHB, APEDA and NABARD. National Horticultural Board has given support through various programs to development floriculture including fruits and vegetables. APEDA nurtured the floriculture industry by various strategic measures. NABARD gave refinance facilities to bank and financial institutions i.e. State Cooperative Bank, Commercial Bank and State Agriculture Development Finance. The NHB has considered two pronged strategies: First, promotional activities to give boost to the process of employment generation, increase in income of small and marginal farmers and backward communities in the horticulture development process. Second, catalytic activities for commercialization of horticulture through production, post harvest management and processing with enhanced productivity, processing and marketing related programs.

SWOT analysis:

If Indian floriculture intend to tap the potential of floriculture produce both in India and Abroad, the assessment of the present status of the floriculture business area through SWOT analysis will provide a great help to them. A comprehensive evaluation of the current status of the floriculture business from the view point of its strength, weakness, opportunities and threats (SWOT) reveals the following facts:

Strength: Indian companies in the floriculture business are equipped with efficient manpower, technical knowhow and good infrastructural base. Pune, Bengluru, Mumbai, West Bengal, Delhi, Punjab and Chandigarh have already emerged as popular flower growing centers in India, as the climate conditions and soil of these regions suit to flower plantation. In Tulip production India is best among the world. The presence of Asian's largest Tulip garden has brought Kashmir on the world map as a destination of flower in the world. Floriculture industry is basically a labour intensive industry, since the plants require 24 hour-a-day care & attention; there is no dearth of unskilled labour in India especially in the rural areas.

Technical and financial support provided by the department of floriculture in India in the terms of transfer of technology and training for providing cultivation under Hi-Tech poly houses. Like Fan & Pad, Hi-Tech Poly Houses, Shade, Net Houses & Nurseries establishment. Promotional and distribution network for floricultural product have been developed in the metropolitan area, where large variety of flowers are offered to the customers through florimart grid of outlets in different arrangements.

Weakness: In India, agricultural scene is still marked by the strategies for producing more wheat, rice and other cereals along with the oil seeds and pulses. These strategies leading to apathy towards floricultural produce by the government, and in turn by the farmers has made India as having as one of the lowest per capita consumption of the floricultural produce. Some problems like: High cost of adoption of modern technology, Lack of cold storage facilities, Lack of sale and export promotion activities, Unavailability of any floriculture park within the state, exorbitant air freight cost & poor airfreight capacity and less area under cultivation.

Opportunities: With the increase in the standard of living and major changes in the life style of the people due to the socio-economic changes in India, the demand for flowers is increasing at a rapid rate. Encouraged by the enormous rate of growth in domestic demand, large number of export oriented floriculture projects are looking forward to domestic demand to sale their product during the lean export seasons. There is rapidly growing demand for the different variety of flowers in various big cities and industrial township for their

institutional buyers like star hotels, big organizations and corporate houses, churches, temple, mosque, travel agencies, hospitals, embassies and trade mission, foreign organization and organizations in hospitality industry etc. A growing market for flowers at domestic, national and international level in which demand exceeds the supply and the world demand is estimated to grow anywhere between 15 and 25 % per annum respectively. The high production costs in developed countries provide opportunity as they rely largely on imports to meet their domestic demand.

Most major flower producing countries at present are industrialized countries and are small in surface area. The acquisition cost of land is therefore very high and this makes it unattractive to set up floriculture units in these countries thus India has a great opportunity back upon floriculture.

Threats: The major threats for floriculture are: Production is largely restricted to summer due to extreme hot and in winter extreme cold in some state of the country, High rate of import duty on Indian cut flowers, High cost of finance and high cost of production during winter, Unavailability cold storage units in Airports & Unstable political policies & conditions. With so many businessmen jumping on to the floriculture bandwagon, quality has become the major concern, as qualities of floral fabricate are ignored by many of them in the name of more production of floricultural produce. The inferior quality of flowers will affect domestic as well overseas produce. In the overseas market if some exporters consistently send inferior stem, the entire country branded bad, and even our best flowers would not get top prices as the inferior qualities won't make the grade at the auction centers and will automatically be eliminated from export assignment.

Apart from the well established name in the global flower trade like Netherlands, many other countries, Israel are also posing though competition in the global flower market. Adding to the woe is the discriminatory trade policy of the European community, which favour the import of flowers from Israel and African countries by lowering down import duties on the import of flowers from these countries and charge high import duty from Indian exporters of floriculture produce, thus making the Israeli flowers cheaper than the Indian ones. Although the flowers grown in a green house retain their freshness for up to 10 days post harvesting as compared to 3 to 5 days for those grown in open field, but the cost of setting up green house is too high. Since the small industries and farmers are unable to afford this heavy cost, they are forced to make way for big industrialists and MNCs financed floriculture projects. Therefore the high fixed costs in the floricultural projects pose threats to the survival of small farmers and entrepreneurs.

Suggestions:

- > Setting up of an export promotion council for export of floriculture products.
- > Organization for appropriate training for personnel involved in production and export of floriculture products.
- Establishment of appropriate marketing and distribution channels.
- > Setting up a floriculture park in every state of India.
- > To make the producers & exporters aware about effective quality control measures.
- Increase in production of value added products like dry flowers, seeds, potted plants.
- > Quality of the floriculture produce must be upgraded so that Indian cut flowers can confirm with international specifications.
- > National Horticulture Board and Agriculture University must provide R&D support to the floriculture.
- > To ensure the flowers reach the market in the best possible condition and full fragrance and vase life, charter cargo flights to fly flowers quickly to the market must be arranged.
- > Operations cold stores must be made at the airports where the flowers can be kept fresh till they are flown out.

Conclusion:

The products from India have garnered attention from international markets. The favourable climatic conditions for floriculture in the valley, the availability of fertile land and trained labour, proximity to markets, high returns for floriculture products have encouraged people to invest in floriculture but if we have to record significant presence in International market and in places like Europe, USA & Middle East, we need to cultivate flowers that meet the stringent quality norms that most of the countries have and also cultivate quality value-added products which remain in high demand in the international markets. In order to make the presence felt in international markets a lot needs to be done in terms of improving infrastructure, providing technical knowledge, having a quality control mechanism in place, sale and export promotion centres, bank loan facility and establishment of Floriculture Park & better government policies in India.

References:

- 1. K. R. Manohar & Igathinathane, (2007), 'Greenhouse Technology and Management'. B.S. Publication Hyderabad. 2nd edition Page 231.
- 2. S. K. Bhattacharya, (2006), 'Advance in Ornamental Horticulture', vol.6, Painter Publishers, Jaipur.
- 3. Bhoopesh Punera. (2017) Economics and Institutional Aspects of Protected Cultivation of Carnation in Himachal Pradesh. Agricultural Economics Research Review 30:73-80.
- 4. Access from electronic source wwwnhb.gov.in, (2017), Ministry of Agriculture, Govt. of India.
- 4 M. Naveen Kumar, S. Ravichandran, (2017), 'Economic of Green house Rose production in Krishnagiri district, India, Journal of Floriculture and Landscaping,3: 11-15.
- 5 Mandal, Acharya, Choudhry, Sarangi, (2009), 'Technology gap in Floriculture', Agrotech, Udaipur.
- 6 Goyal, S. K. (1999), 'Economics of Rose cultivation and its Marketing in Sonepat District of Haryana', Indian Journal of Agriculture Marketing, 13: 44-51.
- 7 Mathivanan. B. (2013), A study on rose cultivation and marketing pattern in Hosur Taluk. Journal of Exclusive Management Science 2: 10-14.
- 8 P. Karuppaiah, (2017), 'Orchids genetic diversity for blooming floriculture industry', Journal of Floriculture and Landscaping, 3: 7-10.
- 9 Sindhu, S. S. (1995), 'Present status of floriculture-challenges, opportunities and constraints'. Farmers and Parliament, 30 (7): 27-28.
- 10 Agricultural Produce Processing and Export Development Authority (APEDA) (2016), Presentation on Floriculture Export by APEDA. Ministry of Commerce & Industry, New Delhi.
- 11 Batt, P. J. (2001) 'Strategic Lessons to Emerge from an Analysis of Selected Flower Export Nations'. Journal of International Food & Agribusiness marketing, 11 (3): 41-54.
- 12 Jeevitha, E. & Sridevi, K., (2008), 'Floriculture and Exports', Kisan World, 35(12):13-15.
- 13 L. Balamurugan, & K. Tamizhjyothi, (2013), 'SWOT Analysis of cut flower industry in Tamil Nadu, Business Sciences International Research Journal Vol. 1(2): 539-542.
- 14 Raghava, S. P. S. (2001). Floriculture-a viable diversification option in agri-business. Indian Horticulture, 44: 41-45.
- 15 Bhattacharjee, S.K. & De, L.C.,(2003), 'Advanced Commercial Floriculture, Aavishkar Publishers & Distributors, Jaipur, 2: 397-399.
- 16 Agricultural Produce Processing and Export Development Authority (APEDA) (2018), Presentation on Floriculture Export by APEDA. Ministry of Commerce & Industry, New Delhi.
- 17 D. Vahoniya, S. R. Panigrahy, D. Patel & J. Patel, (2018) "Status of Floriculture in India: With Special Focus to Marketing', , Int. J. Pure App. Biosci. 6 (2): 1434-1438.
- 18 Economic Survey International Trade Statistics (2015), Yearbook (2015-2016): Government of India, New Delhi.
- 19 National Horticulture Board (2, 18): Horticultural Statistics at a Glance, Horticulture Statistics Division Ministry of Agriculture & Farmers' Welfare, Government of India.
- 20 Boss, T. K., (2012), 'Floriculture in India', Kalyan publication, Chennai, 12(2): 234-318.
- 21 National Horticulture Board, (2016). Report of Horticulture Database, Horticulture Statistics Division, Ministry of Agriculture & Farmers' Welfare, Government of India.