



Commercial Floriculture Industry in India: Status and Prospects

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ABSTRACT

The present paper discusses about the status of Hitech floriculture industry in India. The present status of commercial floriculture industry is discussed. Alongwith this, the problems and prospects of the industry is are highlighted. The floriculture industry is characterized by traditional as well as modern cut flowers. The cutflower industry is rapidly growing worldwide. While this industry is dominated by selected European countries as well as US and Japan, the production base is shifting from these countries to low cost countries like Kenya, Colombia, India and China. While much needs to be done, Indian floriculture industry has lot of potential of growth. The consumption within India is increasing with changing socio economic structure as well as effects of globalization. At the same time, India is preparing itself to take an increasing role in the world trade of floriculture, which at present is miniscule. The government has recognized the importance of this industry and hence given a special focus to this industry. The National Horticulture Mission is an endeavor of the government to promote holistic development of floriculture and with an integrated approach towards cluster development.

INDEXING TERMS / KEYWORDS

Floriculture; Hitech Floriculture; Agriculture Business; Commercial Floriculture.



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INTRODUCTION

Floriculture, or **flower farming**, is a discipline of horticulture concerned with the cultivation of flowering and ornamental plants for gardens and for floristry, comprising the floral industry. Floriculture crops include bedding plants, flowering plants, foliage plants or houseplants, cut cultivated greens, and cut flowers. . Cut flowers are usually sold in bunches or as bouquets with cut foliage. The production of cut flowers is specifically known as the **cut flower industry**. Hitech Floriculture refers to growing of high quality cut flowers under controlled conditions in poly-house through the use of technology like tissue cultured plants, water soluble fertilizers, part-mechanization, cold chain, packaging and post-harvest technology for export and domestic markets. The flowers that are mainly grown here are Dutch Rose, Gerbera and Carnation. Floriculture comprises both traditional and modern flower crops. The traditional flowers are grown in open-air conditions. These include chrysanthemum, jasmine, crossandra, rose, tuberose, aster, marigold, champaka etc. The modern flower crops are grown in controlled conditions (Green Houses). These include roses, gerbera, carnation, etc.

1. FLORICULTURE WORLDWIDE

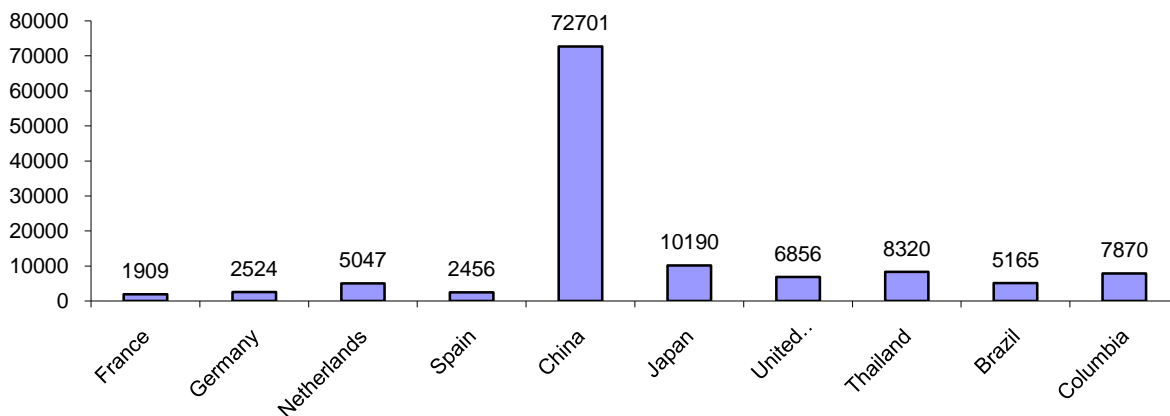


Figure 1: Worldwide Area under Protected Cultivation (In Hectares) *Source : (AIPH / Union Fleurs, 2010)

The Figure above shows the worldwide area under protected cultivation in major countries. China is the clear-cut leader with more than 72,000 Hectares of land under protected cultivation. The other major countries using this advanced technology extensively are Japan with 10,190 ha, United States, Thailand, Columbia and Netherlands. It may be noted here that although China has huge amount of land under protected cultivation, its share in global trade is negligible. All the production of this cultivation is consumed within the huge local market of China.

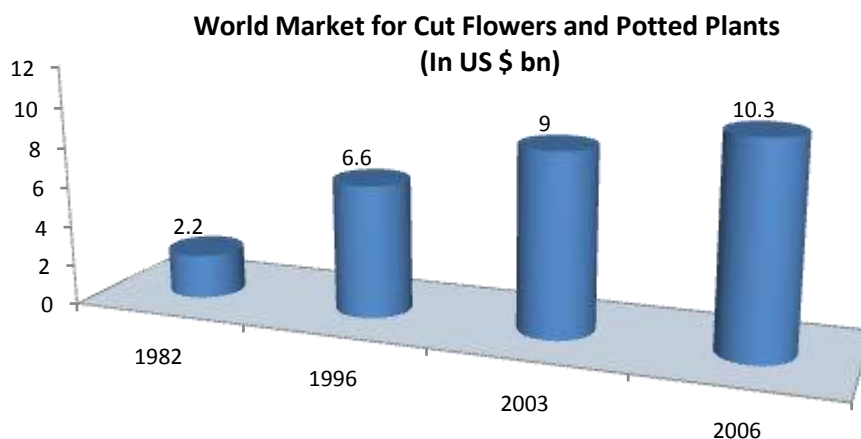


Figure 2: World Market for Cut Flowers and Potted Plants (In US \$ bn) *Source : (AIPH (The International Association of Horticultural Producers), 2010)

The figure above shows the steady rise of world market for cut flowers and potted plants since 1982. In 1982, the market was 2.2 billion US \$ which rose to 6.6 billion in 1996 and by 2006, the world market for cut flowers and potted plants had become 10.3 billion US \$. This shows that since 1982 the market has grown at compounded annual growth rate (CAGR) of 6.64%.

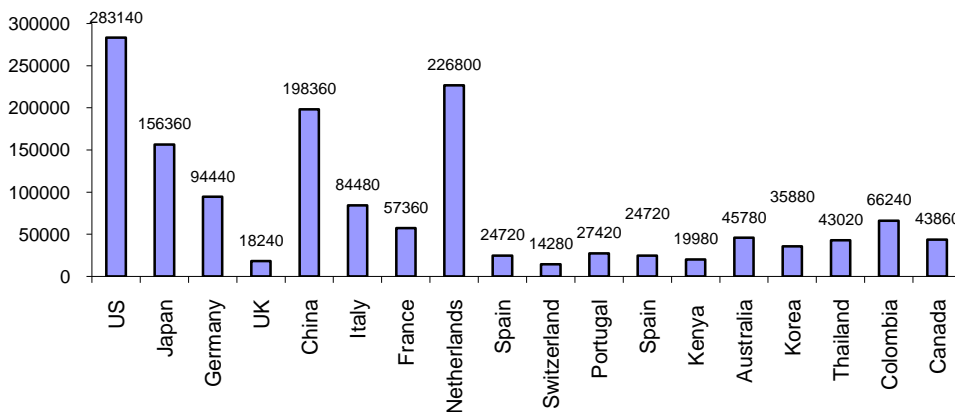


Figure 3: Worldwide production of flowers of leading countries by Value (in Rs. Crores) *Source: (AIPH / Union Fleurs, 2010)

The data analysis shows that world leader in flower production value wise is US with production value of Rs.28,314 Crores and having worldwide production share of 18%. US is followed by Netherlands having 14.4% share and Japan with 9.9% share in production value. The total world value of floriculture production is Rs. 1,57,176 crores. It may be noted here that China which is having 3,06,538 ha of land under floriculture which is 43.6% of the world area under floriculture (7,02,383 ha) is having third rank in terms of production value of Rs. 19,836 crores (12.6% global share).

2. FLORICULTURE IN INDIA

In India, the flowers have immense importance while offering as religious worship to various deities, as also for the purpose of decorating the places, particularly when there are various festivals. People also like it as beautifying themselves since many centuries. Infact, the flowers have great importance and significance in the Indian culture. But the export of Indian flowers in the world market is very small, because the International demand is for the cut flowers whereas in India, more usage is for loose flowers and traditional flowers. Only now has the Hitech flower industry been given its due importance.

The Government of India's Ministry of Commerce and Industry has given a special importance to the commercial floriculture industry, and special emphasis has been given to the exports of flowers to other countries by the EXIM (Export Import Bank of India). The flower industry is still not yet developed and is in its nascent stage. It has a very negligible share in the world trade of flowers. But as a result of a lot of interest being developed in domestic entrepreneurs and farmers, a lot of new units of floriculture are coming all over the country, to serve the domestic as well as the international market. The industry promises a lot of potential for the Indian farmers and the entrepreneurs alike. There is tremendous export potential for the export of the floriculture products from the country, and is a viable alternative for the debt ridden traditional farmers, with the help of financial institutions.

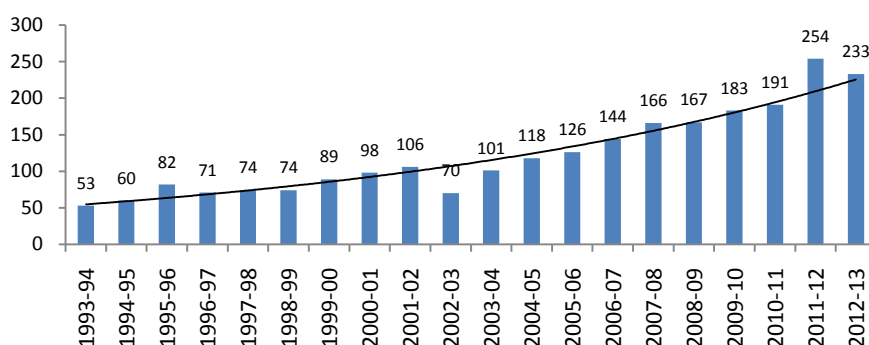


Figure 4: All-India Area under Floriculture('000 Hectares)Figure 3*Source : (Indian Horticulture Database, 2012-13)

It is evident from the figure above that there is a rise of area under floriculture in most of the years with an exception in 1996-97, 2002-03 and 2012-13 when there was a reduction in the area. The total area under floriculture has grown with % (Compounded Annual Growth Rate) CAGR 7.7 1993-94 to 2012-13. The graph above clearly reveals the increasing trend of area under floriculture in India. The traditional flowers like jasmine, roses, tuberose, marigold and so on comprise about two thirds of the cultivated area. The modern flowers such as gerbera, carnation, Dutch rose, orchids, anthurium, lillium and other ornamental plants are being increasingly grown both for domestic consumption as well as exports. The people are increasingly using the new age greenhouses for cultivating the cut flowers, so that they can grow them all throughout the year, and have good quality. Since the floriculture has picked up lately, it is yet to increase in substantial



area. Most of the new commercial floriculture units have come up only in the last decade. Several export oriented units by various corporate enterprises have started commercial floriculture cultivation. This area is likely to increase to about 600 ha in the next few years

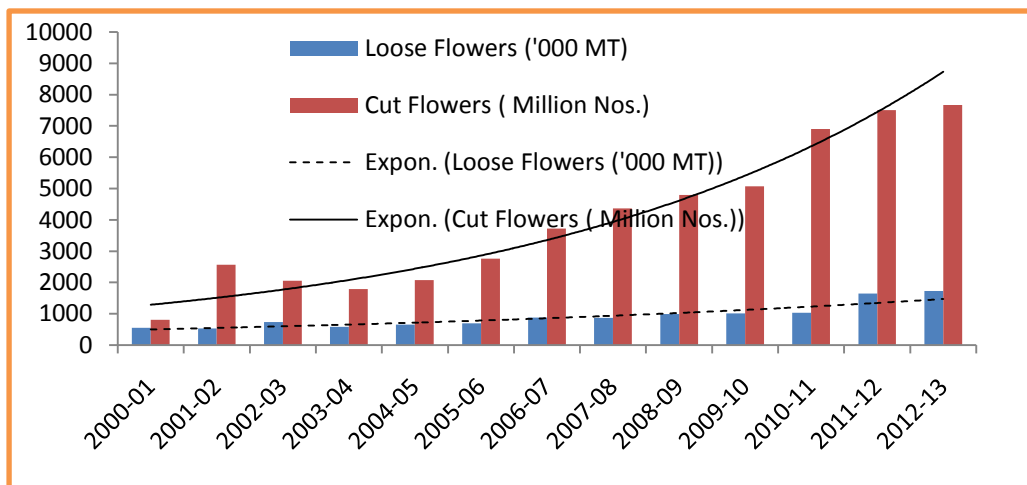


Figure 5: All-India Production of Loose & Cut Flowers*Source : (Indian Horticulture Database, 2012-13)

The figure above shows the All India production of loose and cut flowers from 2000 to 2013. The figures show that there is an increasing trend in both loose as well as cut flowers. The increase in production of cut flowers is more vigorous than the increase in loose flowers. The figures indicate that production of cut flowers has increased at a Compounded Annual Growth Rate (CAGR) of 20.68 % which is a very rapid growth. The production of loose flowers has however grown with a CAGR of 9.92 % during these twelve years. This clearly shows that there is a shift of production preference of growers from traditional flowers which are mainly used in domestic market to modern cut flowers which are more profitable and has a lot of export potential. The figure above shows visually the difference in growth rate in loose flower production and cut flower production. The loose flower production graph appears to slowly increasing whereas the graph of cut flower is having a rapid increase in production. It also can be seen that in year 2001-02, there is a major rise in growth rate (219%). There appears to be a slowdown in the years 2002-03 and 2003-04. Since 2004 there is a continuous growing trend of cut flower production.

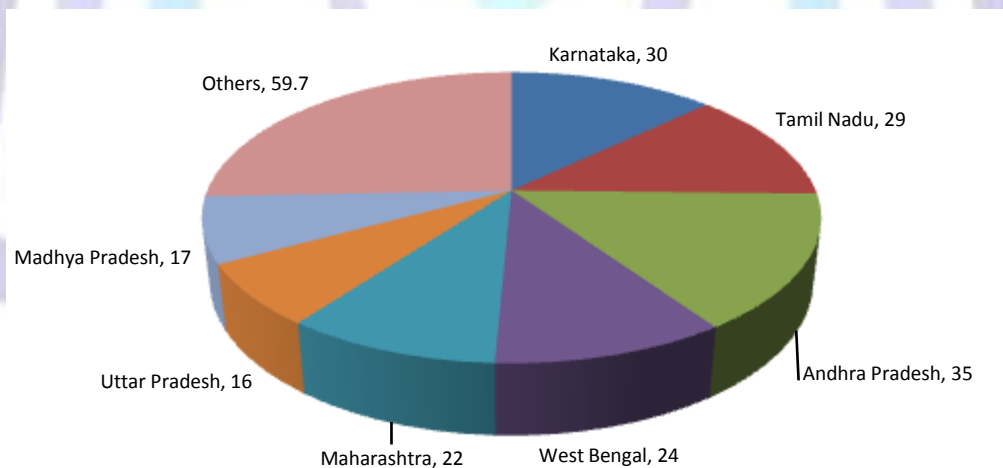


Figure 6 Statewise Area under Floriculture 2012-13*Source :National Horticulture Board. Indian Horticulture Database, 2013

It is revealed from the table that the leading states in India with respect to area under floriculture are Tamilnadu (12.5%), Karnataka (12.9%), West Bengal(10.3%), Andhra Pradesh (15%) and Maharashtra (9.5%). It may be noted here that the area under floriculture in discussion is including loose flowers as well as cut flowers both.

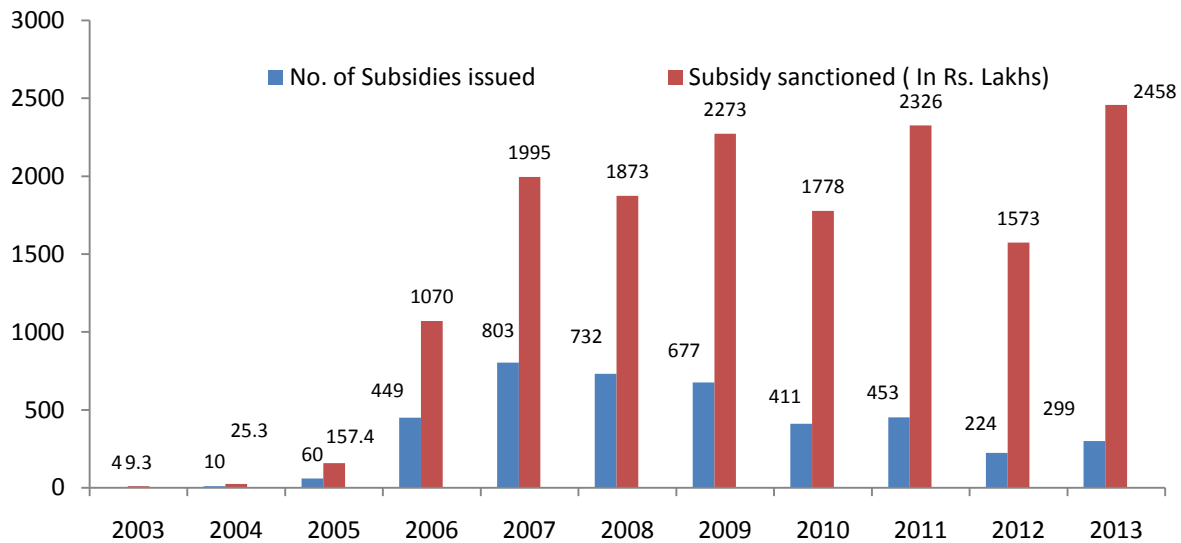


Figure 7: No. of Subsidies issued and amount sanctioned by National Horticulture Board from 2003-2013*Source: National Horticulture Board database.

The above figure shows the number of subsidies issued and the amount of subsidy sanctioned by National Horticulture Board (NHB), New Delhi from 2003 to 2013. It shows a definite growing trend in the number of people availing the subsidy scheme of NHB, as well as the amount disbursed as subsidy for such projects.

3. DISCUSSION

The cutflower industry is observing a growing trend since last decade worldwide. It can be inferred from the discussions in the previous chapters that although this industry is dominated by selected European countries as well as US and Japan, the production base is shifting from these countries to low cost countries like Kenya, Colombia, India and China. While much needs to be done, Indian floriculture industry has lot of potential of growth. The consumption within India is increasing with changing socio economic structure as well as effects of globalization. At the same time, India is preparing itself to take an increasing role in the world trade of floriculture, which at present is miniscule. The government has recognized the importance of this industry and hence given a special focus to this industry. On the basis of discussion in previous chapters, the major observations have been summarized as under :-

- It is observed that the world market for cut flowers and pot plants has been continually increasing at a compounded annual growth rate of 10.74% since 1982 to become 34.6 billion US\$ (1,55,700 crore Indian Rs.) in 2009. This steady double digit growth rate since last 27 years shows that there are bright prospects for investing in the floriculture industry, given the rise in income levels and increase in consumption of cut flowers especially in Asia.
- The area under floriculture cultivation worldwide is 7,02,383 hectares out of which China and India account for a major share of 43.6% and 23.8% respectively. But when the global production of flowers is observed value wise, the share of China is meager 12.6% and India's share is negligible (less than 1%). The researcher thinks that this is because the majority of flower production in these two countries is of loose flowers grown in open field which are low value products compared to cut flowers which are grown in greenhouses. U.S. is the largest producer of flowers with share of 18% in world production, followed by Netherlands (14.4%) and China (12.6%).
- It is revealed that Netherlands is the leading nation in the floriculture exports worldwide with a share of 54.9% value wise, followed by Colombia (14.6%) and Ecuador (6.1%). It is noteworthy to mention that Kenya, a third world African country, whose GDP in 2009 was 1.7% of that of India is ranked fourth with a share of 5.5%. The largest importing countries include Germany (21.1%), USA (19.2%), UK (19.1%) and Netherlands (15.4%).
- Netherlands is the floriculture capital of the world, famous for its flower auction system. It handles 54.5% of total world flower exports, 15.4% of world imports and has share of 14.5% of world flower production. Netherlands also has 2nd highest per capita flower consumption in the world (Rs.3360 per annum) only behind Switzerland (Rs. 4620 pa).
- The floriculture sector in India is observed to go through enormous change within past two decades. The area under floriculture cultivation has increased from 53,000 hectares in 1993-94 to 1,76,000 hectares in 2009-10. The disclosure of the study is that there has been a compounded annual growth rate of 7.31% since last 17 years. However if this growth is observed in the light of cut flower and loose flower production, it is revealed that within the last decade from 2000 to 2009, the loose flower production has increased with compounded annual growth rate of 6.21% whereas cut flower production (which can be termed as hitech floriculture; the subject area of the researcher) has increased by 20.23% CAGR. This growth rate is comparable with the best of any other industry. The cut flower production was 507 crore numbers in 2009-10.



- It is also observed that there has been a steady rise in exports of flowers from India with a compounded annual growth rate of 20.4% since 1993-94 to 2008-09 which stood at Rs. 368 crores in 2008-09. In India, the leading states in terms of area under floriculture cultivation are Tamilnadu 32,000 ha (18.2%), Karnataka 27,000 (15.3%), West Bengal 21,900 ha (12.4%), Andhra Pradesh 19,500 ha (11.1%) and Maharashtra 17,500 ha (9.9%). The area under floriculture cultivation in Maharashtra has grown with CAGR of 11% from 2003 to 2009. In terms of production of cut flowers in India, West Bengal is leading with 44% share in production followed by Karnataka (12.23%) and Maharashtra 11.94%.

REFERENCES

- [1] (2006,2008,2009). Indian Horticulture Database. Gurgaon, India: National Horticulture Board. (2009).
- [2] International Statistics : Flowers and Plants Annual Book 2009. Netherlands: AIPH/Union Fleurs.
- [3] Abraham, V. (2002). Summary Report. The International Conference on Commercial Floriculture. Bangalore.
- [4] Amba, B. (2007, January 19). Bangalore gets an auction center to tap flower power. The Indian Express.
- [5] Asopa, V. (2006). Creating competitiveness in Indian Floriculture. Argentina: Annual World Symposium, Research Paper.
- [6] Bhattacharjee, S. (2006). Vistas in Floriculture. Jaipur: Pointer Publishers.
- [7] Bose, T., Yadav , L., Pal, P., Parthasarthy, & Das, P. (2003). Commercial Flowers (Vol. II). Calcutta: Naya Udyog.
- [8] Chattopadhyay, S. (2007). Commercial Floriculture. New Delhi: Gene-Tech Books.
- [9] Chowdhary, D., & Mehta, A. (2010). Flower crops : Cultivation and Management. Jaipur: Oxford Book Company.
- [10] Commodities Bureau. (2006, July 31). Corporates eye floriculture as next booming sector. The Financial Express.
- [11] Correspondent. (2006, September 16). Dubai flower center to spread net in India. The Asian Age.
- [12] Das, A. (2007, October 1). Floriculture, now a blooming sector in India. Deccan Herald.
- [13] Dattatreyyuli. (1997). Export potential of fruits, vegetables and flowers from India. Mumbai: National Bank for Agriculture and Rural Development India (NABARD).
- [14] Department related Parliamentary Standing Committee on Commerce . (2005). Seventy Sixth Report on Floriculture. New Delhi: Parliament of India, Rajyasabha.
- [15] Dept. of Agriculture, Govt. of India. (2010, March). NHM Quarterly Newsletter.
- [16] Floraholland. (2010). Annual Report 2009. Netherlands: Floraholland.
- [17] Gorakh, S. (2009, December). Development of Floriculture in India. Floriculture Today, 14(7).
- [18] Henry, V. (2008). The Transportation costs of Fresh Flowers : A comparison of Ecuador and other Exporting Countries. PHD Thesis. (G. M. University, Ed.) USA: Center for Transportation Policy, Operations and Logistics, School of Public Policy
- [19] Ingenbleek, P., Ederer, P., & Christensen, J. (2007). Floraholland Flower Auctions : A Dutch merger in the face of globalization. Netherlands: Wageningen University - EFAS.
- [20] Kolavalli, S., Atheeq, L., & Xavier, J. (1991). Floriculture industry in India. New Delhi: Oxford & IBH Publishing Co.



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