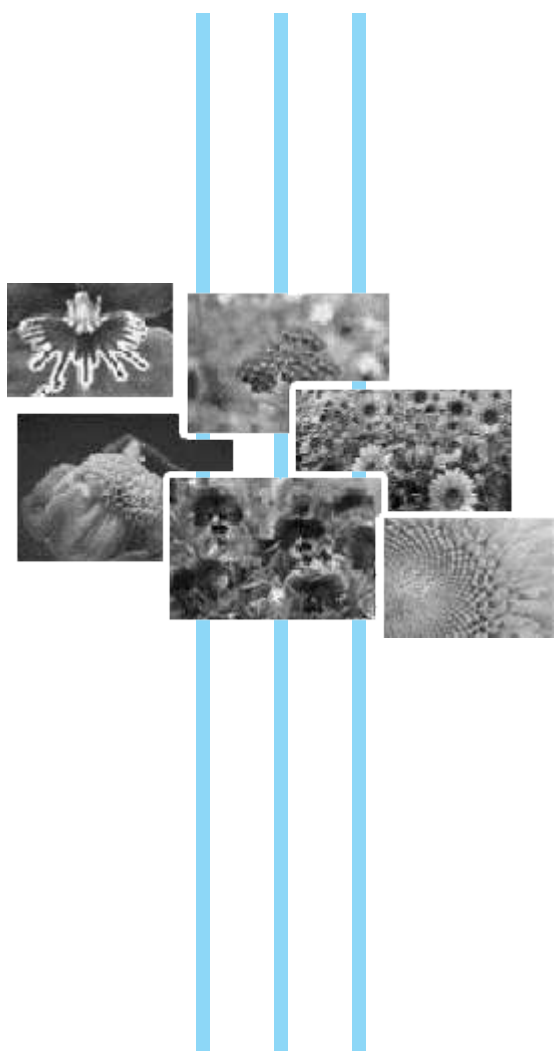


Indian Floriculture Industry: Opportunities and Challenges

K. Muthukumar*



Post globalization, floriculture has become an important commercial activity in agriculture. Floriculture activity has evolved as a viable and profitable alternative, with a potential to generate remunerative self employment among small and marginal farmers, and earn the much needed foreign exchange in the developing countries such as India.

World Production and Consumption

The world production of floriculture is growing at a rate of 10 percent per year. There are currently over 50 countries that are active in floriculture production on a large scale. In terms of production value, the Netherlands, the United States, Japan, Italy, Germany and Canada are the largest producers of cut flowers and plants. With China and India having the majority of the world acreage under cut flowers and plants production in the world, the Asia-Pacific region has the major share (77 percent) of the total world area under floriculture production. Europe, the USA and Japan are the major consumers of floriculture products. Germany is the biggest consumer, followed by the UK, France and Italy.

World Floriculture Trade

The global exports of floriculture products stood at US\$ 17 billion in the year 2007. Fresh cut flowers and foliage accounted for around 49.1 percent (US\$ 8.31 billion), and live plants, bulbs and cuttings accounted for 50.9 percent (US\$ 8.60 billion) of total floriculture products exported in 2007. Developed countries in Europe, America and Asia account for more than 90 percent of the total world trade in floriculture products. With an annual average growth rate of 10.3 percent, world exports are expected to reach US\$ 25 billion by 2012.

The world imports of floricultural products in 2007, stood at US\$ 16.7 billion. Germany (US\$ 2.59 billion) was the largest importer, followed by the United Kingdom (US\$ 1.89 billion), the USA (US\$ 1.81 billion), the Netherlands (US\$ 1.55 billion), and France (US\$ 1.43 billion).

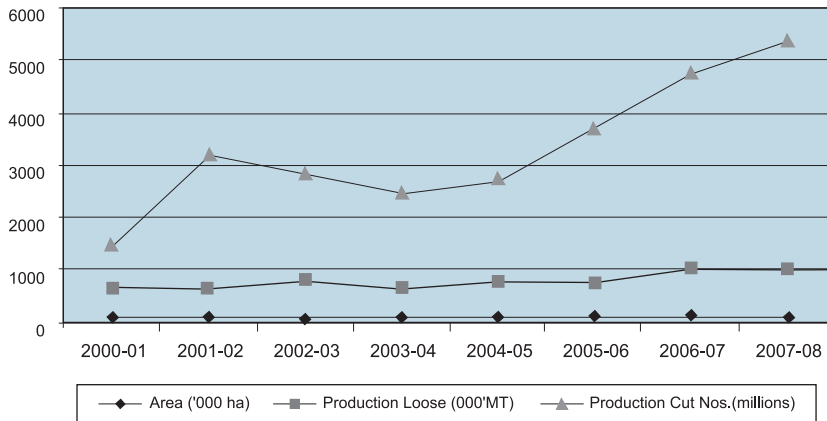
Flower Trade and Trade Channels

The international flower trade is governed by several codes of conduct, besides the phytosanitary obligations of the importing countries. The Dutch milieu programma sierteelt (MPS) programme addressing to environmental quality issues, have become almost mandatory in the direct trade channels and prominent in the auctions. Others include,

* Chief General Manager, Export Import Bank of India, Mumbai



Production Trend of Flowers in India



Source: National Horticulture Board

Flower Labelling Programme (FLP), Fair Flowers Fair Plants label (FFP), and UPOV - Protection of new varieties – for protection of Breeder's rights.

The trade channel for flowers mainly comprise auctions and wholesale trade. Auctions have been the most important trade channel for imported flowers. However, in the recent years, trade through wholesale or direct sale channel has been on the rise.

Indian Floriculture Industry

The Indian floriculture industry has been growing at a compound annual growth rate (CAGR) of 25 percent over the past decade and is currently worth US\$ 230 million. It comprises the florist trade, nursery plants, potted plants, bulb and seed production, micro propagation material and extraction of essential oils from flowers.

Karnataka, Tamil Nadu, Andhra Pradesh, West Bengal, Maharashtra, Uttarakhand, Uttar Pradesh, Delhi, Haryana, Kerala, Himachal Pradesh and North Eastern states are the major flower growing states in India. Tamil Nadu is the largest loose flower producing state, while West Bengal is the leading cut flower producing state in India.

Rose is the principal cut flower grown all over the country. Other most important cut flower crops in the country are Gladiolus, Tuberose, Asters, Gerbera,

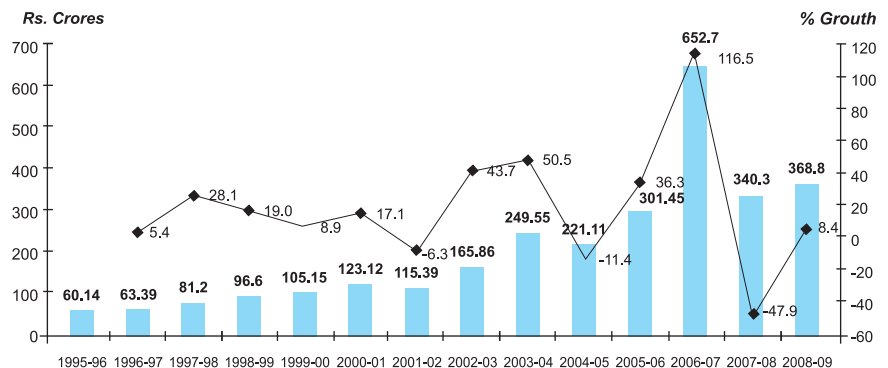
Carnation, Anthurium, Lilium, and Orchid.

While exports remain the prime motivator for Indian flower cultivators, the demand in the domestic market is also on the rise. Marketing of cut flowers in India is much unorganised at present. In the metros, however, in the recent years, some modern florist showrooms have come up, where flowers are kept in controlled temperature conditions, with considerable attention to value added service. To facilitate flower trade, two auction centres also have been established at Bangalore and Mumbai. A number of Export Oriented Units (EOUs) have been set up in the country in

floriculture segment in the last decade and half. Most of the EOUs in the country are largely dependent on foreign collaborations for technological support. For the Indian entrepreneurs, the joint ventures are more like turn-key collaborations. However, in the recent years, a number of large corporate houses such as, ESSAR group, TATA group, Reliance, ITC, and Bharti have also invested in the flower sector.

Protected cultivation is not a common practice in India. The greenhouse designs and structures for the modern floriculture units are mostly imported from countries like Holland, Israel, France, and the USA. In India, three types of greenhouse production technologies could be identified - low-tech units, mid-tech units and hi-tech units, with total investment costs varying significantly among the three groups.

Floriculture Exports from India



Source: Director General of Commercial Intelligence and Statistics



Exports from India

India's exports of floricultural products in the year 2007-08 decreased by 48 percent to US\$ 84.5 million (Rs. 340 crore), from US\$ 144 million (Rs. 653 crore) in 2006-07, and further decreased by 5.18 percent in the year 2008-09 to US\$ 80.19 million. In the recent years, dried flowers and foliage have been forming a large part of floricultural product exports from India. During 2008-09, dried flowers constituted over 60 percent of cut flowers exports, and dried foliage constituted around 99 percent of total foliage exports from India.

Europe continues to be the largest destination for Indian floriculture exports. However, in the recent years Indian exports of floriculture products have also extended to the Japanese and Australian markets.

Other Associated Industries

Other associated activities of flower growing in India include the dry flower industry and the essential oil industry. India is the fifth largest exporter of dried flowers and second largest exporter of dried foliage in the world accounting for around 7 percent of world exports in dry flowers and foliage. The main export markets for India's dry flower industry are the USA, the Netherlands, the UK and Germany. West Bengal accounts for around 70 percent of the dried flower exports from India.

India is the second largest exporter of essential oil in the world after the USA. India's exports of essential oil stood at US\$ 298.7 million in 2007-08. India is the largest exporter of jasmine oil in the world accounting for over 40 percent of total world exports in jasmine oil.

Government Incentives / Initiatives

Government of India acknowledges the potential of the floriculture industry and has conferred 100 percent export oriented industry status. Various incentives are being offered by the Government of India, which have enabled the setting up of a number of floriculture units for producing and exporting flowers. Most of these are located near Mumbai, Bangalore and Delhi. These units have obtained technical know-how from Dutch and Israeli consultants.

Tax benefits are offered to new export oriented floriculture

companies in the form of income-tax holidays and exemption from certain import duties. Duties have been reduced for import of flower seeds and tissue-cultured plants. Financial support is provided for setting up of pre-cooling and cold storage units, as well as for using improved packaging material.

Government of India promotes, assists and facilitates the setting up of Agri Export Zones (AEZ) in association with the State Governments with the objective of providing remunerative returns to farming community in a sustained manner and to increase their competitiveness. There are at present six operational Agri Export Zones for floriculture development in India.

Outlook and Prospects

The economic crisis has significantly affected the floriculture industry worldwide with demand for floricultural products considerably declining in all the major consuming countries, such as Europe, the USA and Japan, consequently affecting export levels, profit margins, and employment in the flower sector, particularly in the developing countries. The decline in demand applies to all flower and product varieties. Depression in pricing has been observed across the product segments. Decrease in turnover is a major concern for most of the floriculture companies in the major markets, which is leading to estimated 30-50 percent drop in margins. Other factors affecting the growth of the industry are higher freight and input costs due to higher fuel and energy costs.

Majority of the players see little room for improvement in the industry in the next couple of years, and expect the situation to improve later. Nevertheless, according to the industry experts, current situation may lead to a sector-wide transformation and consolidation.

Albeit, the current demand slowdown, improving product availability, quality and marketing standards would increase expansion opportunities in the mature markets, and growing consumer base with higher income is expected to add to the demand in the new markets. Further, with the emergence of newer marketing concepts, such as online sales and specialized florist outlets, floriculture trade in the coming years is expected to see newer dimensions in terms of more distinct consumer demands and product propositions.



India – Outlook

Indian floriculture industry is also affected by the global economic slowdown. Further, the competition in the international arena has been increasing with the entry of new African countries in global floriculture trade. Besides the African countries, a number of Asian neighbours are emerging as competitors in the export markets such as China, Nepal, Sri Lanka and Pakistan. With international trade in the sector showing not-so-favourable scenario, the domestic market for flowers is on the rise with flower consumption in the cities and major towns reportedly growing at 40 percent per annum.

The potential for commercial floriculture expansion in India, including production for domestic and export sales of cut flowers and plants is unlimited, provided the country expands the production of existing products as well as the product range. In this context, it may be mentioned that the Indian flower industry has set an export target of achieving US\$ 1 billion in next three years.

India's export markets have also been diversifying from traditional markets, such as the EU and the USA, to new markets in the East Asia, such as, Japan, and Australia. However, more concerted efforts required for the Indian floriculture industry to make a significant mark in the new and emerging markets, such as those in the East European region, and in the Asian region.

Some of the areas in which market opportunities exist for the Indian floriculture industry are: hi-tech cultivation and product diversification to competitively grow Orchids, Anthurium, Gladiolus, Tuberose, and Foliage varieties, as the demand for tropical flowers and plants is increasing worldwide; tapping the landscaping opportunities as with growing real estate market worldwide, nursery industry is also opening up for supplying trees, greens and ornamental plants; floral arts-floral designing is increasingly getting popular in the events such as weddings and festivities; and growing demand for custom made products, dry flowers and foliage, flower seed production, flower extracts and essential oil, and natural dye.

Challenges

In spite of the export potential, the performance of the Indian floriculture sector has not been encouraging. The floriculture exports dropped marginally in value terms, from

US\$ 84.57 million in 2007-08 to US\$ 80.00 million in 2008-09. Reasons cited for this shortfall mainly related to trade environment, infrastructure and marketing issues such as high import tariff vis-a-vis African countries. The availability of dedicated carriers for perishables is also low in India and the freight rates are high. The high freight cost puts the industry at a disadvantage. Largely due to inadequate support infrastructure in distant production areas much of the production potential is not optimally utilized and the small unit size of the flower farms in India acts as a constraint with the absence in economies of scale. Further, inadequate cold chain management is not only affecting the future of floriculture trade in the country, but also having a negative impact on the present produce and on its marketability.

The industry is also facing by several challenges at the production level mostly related to availability of basic inputs, including seeds and planting materials, quality irrigation and skilled manpower. Ageing plantations are further adding to the woes of the flower producers in the country.

At the marketing stage, major challenges faced by the Indian flower exporters are related to product diversification and differentiation, vertical integration and innovation, and quality and environmental issues. With increasing involvement of supermarkets in flower trade, organizing logistics is also becoming a critical factor for the Indian flower exporters.

Strategies

Several positive steps are being undertaken to develop the floriculture sector as a viable export sector. However, more strategies need to be adopted to consolidate the strengths of India in this sector and create an efficient backward and forward linkage. The first and foremost requirement is to develop a state-of-the art Integrated Cold Chain for flowers right from the point-of-origin (growers) to the point-of-consumption (customers). The freight cost disadvantage can partially be overcome by achieving economies of scale. To minimize the time taken and damages caused during handling, emphasis should be given on improvement of cargo handling facilities and making internal container depots suitable for floricultural products. Besides creating additional cargo space specific to floriculture, efforts may be taken to increase the frequency of international flights and chartered flights handling floriculture cargo.



The Government of India should make efforts towards encouraging private sector for co-investments in the supply-chain infrastructure. To address the import duty disadvantage faced by India in the international markets such as Europe, it may enhance its efforts in negotiating preferential tariff regimes with such countries, and for an efficient implementation of its developmental initiatives attempts may be made in creating National Export Promotion Council for development of modern floriculture.

Shifting to Integrated Supply Chain Model by integrating small and medium scale growers into large-scale producer supply chains may help in attaining economies of scale in the industry. Periodic re-plantation with appropriate re-plantation support from Government is necessary in order to maintain the acceptable freshness in variety and quality.

Developing the non-traditional areas such as South Gujarat, South Maharashtra, North Karnataka, hilly areas of Tamil Nadu and Karnataka, Uttarakhand, Himachal Pradesh, Jammu and Kashmir, and North Eastern States, which are well endowed to grow flowers and ornamental plants, may help in meeting the growing needs of both domestic and international market.

In order to ensure regular supply of quality inputs such as planting material, efforts should be made to develop and propagate varieties indigenously. To help protect breeder's rights, India may consider becoming a member of the UPOV with adequate safeguard mechanism for the Indian growers. Besides, indigenous technology for modern floriculture is required to be developed to suit the Indian growing conditions. To address the shortage of trained manpower in modern commercial floriculture, training centres and programmes for skill development in floriculture may be set up.

Marketing initiatives should be suitably designed to meet the market requirements, and yet remain competitive. Attention may be required for achieving the flower labeling and certification requirements, besides maintaining international quality standards throughout the production chain. Diversification of product mix is also essential considering the changing pattern of demand. Indian floriculture exporters should emphasize developing other diversified products and marketing them through dedicated outlets, thus, expanding the definition of floriculture from just fresh flowers to products and

accessories manufactured from flowers.

Establishing a network of support systems with the involvement of Government, private sector and research institutions / universities will be another strategy for development of the floriculture sector. Indian auction centres should be made viable and operational by appropriately addressing issues associated with them such as creating adequate infrastructure for auctioning, professionalism, dispute handling and resolution, encouraging traders to trade through the auctions, developing and strengthening backward linkages on a continuous basis, and a cost effective and economical system of reefer transportation.

Indian exporters should adopt customized marketing strategies while targeting various markets. There is need to intensify marketing efforts for direct sales to emerging markets, and expand markets outside the traditional markets. Promoting strong brand recognition for Indian cut flowers and flower accessories through designated outlets at the foreign markets, and advance product positioning in these markets would help Indian flower exporters to compete in international markets effectively. A "consortium" approach may be encouraged among the units for branding, grading, packaging, transporting, quality control, supply assurance, market development, market promotion, and research and development.

Opportunities for India

The market for floriculture products consists of a range of product groups, which offer varying opportunities for countries like India, as potential suppliers. The opportunities are optimal for India in supplying products such as summer flowers, orchids and tropical foliage, particularly during the periods when these products are scarce in the western markets. There are also opportunity for increasing production of value-added products such as dry flowers, seeds, potted plants, and micro-propagants. Opportunities also lie in exploring and developing new markets and expanding in the existing markets.

The strengths of Indian floriculture include the favourable geographical situation, soil and environment, labour costs and the recent investment culture of Indian corporates. With corporate players getting in on the business, and smaller players consolidating their efforts, India's floriculture sector can expect to blossom over the coming years.

