

Regional Trade Potentiality in Ornamental Horticulture

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A huge part of agricultural exports from India comprise of horticulture and allied sectors like fruits, vegetables, aromatic and herbal plants, flowers, spices and plantation crops. In recent years, floriculture has become a viable business sector. In 2013-2014, the total area under floriculture cultivation was about 255 thousand hectares with a production of 2297 thousand metric tonnes. Despite covering only 3 percent of the world area, the collective floriculture export potential of South Asian Association of Regional Cooperation (SAARC) nations (excluding Bhutan) is around 50000 metric tonne with a monetary trade value close to US\$251mn. These statistics are in comparison to a minimal importing of floricultural products of only around US\$63mn. India has a strong presence in procuring propagation materials like live plants, plant bulbs, tubers etc. from abroad and excels in exporting finished products like cut flowers, foliage, parts of plants for bouquets and ornamental purposes. However, ornamental horticulture trading is yet to attain momentum in South Asia due to numerous lacunae along the production setup. This Briefing Paper is an attempt to acknowledge those voids and address potentials for improvements.

Overview

Agriculture is undeniably the chief employment source in India, particularly in the rural areas. Since Independence, India has successfully gone through a Green Revolution (food grains), a White Revolution (milk), a Yellow Revolution (oilseeds) and a Blue Revolution (aquaculture). Agricultural Gross Domestic Product (GDP) growth for 2014-2015 has been estimated of about 4.6 percent as compared to 4.0 percent in the previous four years^[1].

India exports most of its agriculture products particularly to the Middle East, Southeast and East Asian countries. It earned about 10

percent of its export earnings from this trade in 2012 alone^[2]. A huge part of agricultural exports from India comprise horticulture and allied sectors like fruits, vegetables, aromatic and herbal plants, flowers, spices and plantation crops. During 2013-2014, Indian horticulture had a coverage area of 24198 thousand hectares with a production capacity of 277352 thousand metric tonnes^[3].

In recent years, floriculture has become a viable business sector. In 2013-2014, the total area, under floriculture cultivation was about 255 thousand hectares with a production of 2297 thousand metric tonnes in India^[4].

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Trading of Ornamentals in India

Being a nation where nature worship is of prominence, India has centuries old tradition of cultivating ornamental plants. The market is growing because of the shift in socio-economic status of the country. Presently, India has a growing middle-class comprising youth whose disposable income per head has increased. The result is increased affluence and improvement in the general sense of well-being leading to the transformation of the activity of flower cultivation into a million dollar burgeoning industry. In addition, the availability of diverse agro-climatic conditions facilitates the production of many major flowers throughout the year in some or the other part of our country.

Hence, the demand for export outside the country has also increased. Floriculture products mainly comprise cut flowers, pot plants, cut foliage, seeds bulbs, tubers, rooted cuttings and dried flowers or leaves. The flowers and other ornamental parts of the plants are often dyed, bleached or impregnated for value addition as an accessory like a bouquet, boutonniere and floral adornments. Therefore, the significance of the indigenous floriculture industry has been fluctuating from traditional flowers to cut flowers for export purposes.

India has many government and private exporter organisations working towards boosting the floriculture business. In March 2001, Agri Export Zones (AEZs) were set up

by the Government of India across the country. The objective of setting up such zones was to unite all the efforts made by central and state government departments for increasing the exports of agricultural commodities from India. Agricultural and Processed Food Products Development Authority (APEDA) was appointed as the nodal agency by the Central Government to promote setting up of AEZ. The Central Government has sanctioned 60 AEZs for about 40 agricultural commodities and spread across 20 states in the country^[5]. Currently, only five states have been designated as AEZs for floricultural exports (refer Table 1).

Since Indian floriculture industry is presently in the nascent stages of trading, most of the trade facilitating centres are localised in geography. The important floricultural crops in the international cut flower trade are *Rose, Carnation, Chrysanthemum, Gerbera, Gladiolus, Orchids, Anthurium, Tulip and Lilies*. The open field crops are *Chrysanthemum, Roses, Lily, Marigold, Tuberosa* etc.^a The main trading centres are Delhi, Agra, Guwahati, Gangtok, Kolkata, Bhubaneswar, Hyderabad, Chennai, Bangalore, Pune and Mumbai.

Trading of Ornamentals in SAARC Nations

All the eight countries in SAARC have a rich flora and a very wide gene pool. The sub-continent is also geographically placed

Table 1: List of Agri Export Zones in India for Floriculture

Sr. No.	State	District/Area
1.	Tamil Nadu	Dharmapuri(Cut Flowers), Nilgiri
2.	Karnataka	Bangalore, Kolar, Tumkur, Kodagu, Belgaum
3.	Maharashtra	Pune, Nasik, Kolhapur, Sangli
4.	Uttaranchal	Dehradun, Pantnagar
5.	Sikkim (Orchids)	East Sikkim

Source: APEDA, 2014

Table 2: Floriculture Trade by SAARC Nations during 2011-2013
(Quantity in Million Tonne, Value in US\$ Million)

Exporting Country	Qty.	Value	Importing Country	Qty.	Value
India	31793.27	197.84	India	11286.37	47.49
Sri Lanka	15894.26	47.48	Pakistan	7229.97	4.56
Bangladesh	2090.05	5.24	Bhutan	35.98	4.53
Nepal	71.53	0.59	Maldives	725.83	4.34
Pakistan	169.79	0.42	Sri Lanka	401.71	1.73
Afghanistan	43.3	0.02	Nepal	1373.89	0.66
Maldives	0.62	0.01	Bangladesh	0	0
SAARC Exports	50062.82	251.60	SAARC Imports	21053.75	63.31
Total World Exports	17243962	62918.51	Total World Imports	17247680	62934.09

Source: UN Comtrade, 2014

as a hotspot for evolutionary diversity. Hence, it is not a surprise that despite covering only 3 percent of the world's area, the collective floriculture export potential of SAARC nations (excluding Bhutan) is around 50000 metric tonne with a monetary trade value close to US\$251mn (Table 2). These statistics are in comparison to a minimal importing of floricultural products of only around US\$63mn.

Currently, Floriculture Association of Nepal (FAN) and Floriculture Produce Exporters Association (FPEA) in Sri Lanka are two bodies actively advocating the trade of ornamental horticulture among the SAARC nations. After India, Sri Lanka is the second largest country exporting floricultural products. In 1988, a new policy framework prepared by the Ministry of Agriculture and Lands in Sri Lanka had clearly identified the need to initiate a Floriculture Research and Development Programme [6]. Bangladesh has also emerged as a commendable competitor due to the initiatives by Bangladesh Rural Advancement Committee (BRAC). BRAC is the pioneer in commercial flower production through contract farming and marketing in Bangladesh since 2002. In Pakistan, the Export Promotion Bureau (EPB) and the Pakistan Horticulture Development and

Export Company (PHDEC) has taken initiatives with the objective of promoting Floriculture exports. The Ministry of Rural Rehabilitation and Development (MRRD) and Afghanistan Rural Enterprise Development Programme (AREDP) have also recognised the scope of floriculture export in Afghanistan, in their farmers' training programmes. Maldives has shown minimal intervention in Floriculture among the SAARC nations despite having a rich flora ecosystem. Some recent interventions from the Global Environment Facility (GEF) and the United Nations Development Programme (UNDP) through the Small Grants Programme (SGP) have helped in encouraging floriculture in Maldives.

International Trade of Ornamentals

India has become a prominent player in international floriculture business. The liberalisation of the economy, since 1991-92 has also given an incentive to the Indian entrepreneurs for establishing export-oriented floriculture units. During the period of 2011-2014, India had exported floricultural products of around 80533 metric tonne worth US\$229mn throughout the world.

**Table 3: Top 10 Countries in Floriculture Trade during 2011-2014
(Quantity in Metric Tonnes, Value in US\$ Million)**

Exporting Country	Qty.	Value	Importing Country	Qty.	Value
United States	19414.51	44.26	Netherland	4452.69	17.61
Netherland	9006.65	33.22	Thailand	3375.71	12.5
Germany	11813.13	32.27	China	1192.59	5.05
United Kingdom	9231.99	25.45	United Arab Emirates	146.11	1.61
Japan	2265.07	8.63	United States	118.28	1.26
United Arab Emirates	2872.26	7.99	United Kingdom	125.23	1.23
Canada	2421.48	7.75	Israel	70.48	1.16
Italy	2770.57	7	Italy	147.84	1.1
Australia	979.46	5.69	Spain	96.01	0.86
China	1634.8	4.89	Taiwan	67.9	0.46
Total World Exports	80533.1	229.4	Total World Imports	11101.71	48.39

Source: Directorate General of Commercial Intelligence and Statistics (DGCISS) Annual Report, 2014

The top five countries to which India exported these products are the US, The Netherlands, Germany, United Kingdom and Japan. Also, India has imported floricultural products of 11,101 metric tonnes worth US\$48mn from across the world. The top five countries from whom India imports these products are Netherland, Thailand, China, United Arab Emirates and the US (as given in Table 3).^b

A list of top 10 floricultural products available for import and export in India are shown in Table 4 and 5. Clearly, India has a strong presence in procuring propagation material like live plants, plant bulbs, tubers etc. from abroad and excels in exporting finished products like cut flowers, foliage, parts of plants for bouquets and ornamental purposes. Combining the technology revolution of 1990s and cheap skilled labour, the Indian floricultural industry shows a prominent presence in terms of export as well as import of tissue culture plants. In fact the exporting industry is US\$25mn worth – almost five times of that of the import trend. This is worth noticing because the huge revenue generation is caused despite having a

minimal difference of the quantity transaction of around 217 metric tonnes among exports and imports.

Conclusion and Recommendations

Ornamental horticulture is a flourishing industry currently worth around US\$62918mn. Since 1996, India's export performance of floricultural products has been quite noticeable. The real competition is at the country-level in the world market and not at the enterprise-level within the country, so South Asian countries might acquire benefits on a large-scale from dealing in floriculture business. However, jointly there is a need to revisit the trade models currently being used.

Some recommendations are as follows:

1. Development of export processing centres and training for the personnel involved in production and export zones is also required. There is a need to make the trade standards robust to compete with that of established exporters like the US and The Netherlands.

**Table 4: Top 10 Floricultural Products Imported by India during 2011-2014
(Quantity in Metric Tonnes, Value in US\$ Million)**

Sr. No.	HS Code	Floricultural Products Imported	Qty.	Value
1	6029090	Other live plants	1853.46	12.35
2	6031300	Orchids: Fresh cut flowers & flower buds for bouquets or for ornamental purpose	2701.60	8.31
3	6012010	Bulbs horticultural	2215.92	7.73
4	6011000	Bulbs, tubers, tuberous roots, corms, crowns & rhizomes, dormant	1968.07	6.14
5	6029030	Tissue culture plants	470.27	5.1
6	6029020	Flowering plants (excluding roses & rhododendrons)	425.13	3.12
7	6049900	Not Fresh foliage, branches & other parts of plants without flowers or flower buds & grasses for bouquets or for ornamental purpose	424.83	1.59
8	6039000	Other cut flowers & flower buds suitable for bouquets/for ornamental purposes	372.68	1.05
9	6031900	Other fresh cut flowers & flower buds	147.96	0.54
10	6021000	Unrooted cuttings & slips of live plants	51.88	0.51

Source: APEDA, DGCIS Annual Report, 2014

**Table 5: Top 10 Floricultural Products Exported by India during 2011-2014
(Quantity in Metric Tonnes, Value in US\$ Million)**

Sr. No.	HS Code	Floricultural Products Exported	Qty.	Value
1	6039000	Other cut flowers & flower buds suitable for bouquets/for ornamental purposes	32952.56	90.32
2	6049900	Not Fresh foliage, branches & other parts of plants without flowers or flower buds & grasses for bouquets or for ornamental purpose	31475.24	63.27
3	6029030	Tissue culture plants	687.26	25.04
4	6049000	Other (Excluding Fresh) Foliage, Branches & Plants, Without Flowers Buds & Grasses, Mosses & Lichens	7015.38	18.92
5	6031100	Roses: Fresh cut flowers & flower buds for bouquets or for ornamental purpose	3723.38	15.09
6	6024000	Roses, grafted or not	1270.34	6.03
7	6029090	Other live plants	712.60	3.28
8	6031900	Other fresh cut flowers & flower buds	846.28	1.58
9	6011000	Bulbs, tubers, tuberous roots, corms, crowns & rhizomes, dormant	303.93	1.41
10	6022090	Other trees, shrubs & bushes	344.34	1.18

Source: APEDA, DGCIS Annual Report, 2014

2. Most of the customer nations for SAARC countries are the European and far East countries, which have stringent phytosanitary laws even for non-consumptive products like flowers. A revamping of these laws might facilitate more business in sectors like tissue culture plants and value added floral products.
3. Interregional export and import of floricultural products have to be encouraged among the SAARC nations, since functioning is under the same umbrella of climate, culture and supply chains. The key imports like orchids could be easily procured from Nepal or Bhutan with comparatively lower transaction costs.
4. A possible hindrance for trade among SAARC countries might be logistics coordination.^c This could be easily solved by collaboration in supply chain information networks. The aim should be to make information available on real-time basis to support decision-making of all the members.
5. Ornamental horticulture could be a sustainable year-round livelihood alternative for farmers who have small land holdings. India can grow different varieties of flowers even during the off-season (November-December) of European and Far East countries. Moreover, since it is less labour-intensive women-based Self Help Groups (SHGs) and Micro, *Small and Medium Enterprises* (MSMEs) could also be encouraged in this direction.

Endnotes

- a. *One of the main reasons for preference of cut flowers in the export market as compared to loose flowers is because cut flowers have longer shelf life and are less susceptible to hazards due to transportation lags.*
- b. *A major concern for flower traders are the non-tariff barriers (NTBs) like sanitary and phytosanitary (SPS) measures, anti-dumping rules and countervailing duties (CVDs). Even free trade rules such as those of the World Trade Organization (WTO) and the European Union (EU) are still nebulous for ornamental horticulture products.*
- c. *India is geographically well connected to majority of the SAARC nations. Trade facilitation ideas like single window systems will enable faster cross border trade of floricultural products.*

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