Flowers Market Access Plan

TA-6782 IND: Enhancing Market Linkages for Farmer Producer Organizations

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1 Crop Background

Floriculture is a branch of agriculture / horticulture that deals with cultivation and management of flowers and ornamental plants. For the purpose of this document, flowers are classified as cut flowers and loose flowers. Cut flowers are primarily used for ornamental purpose and are sold along with the stem, while loose flowers are used for primarily for traditional rituals and garlands and are sold without stem.

1.1 Global Scenario

Consolidated data on production and trade of flowers is not published by reputed organizations such as United Nations. Hence, no data on global production and trade is provided in this document.

1.2 Indian Scenario

1.2.1 Production

India's production of flowers is estimated to be 31.28 lakh MT cultivated across an area of 2.83 lakh hectares in 2021-22. Loose flower production is higher than loose flower production by nearly 200%. In 2021-22, the loose flower production is estimated to be 22.95 lakh MT and cut flower production is 8.33 lakh MT. Since the data published by Government of India does not indicate area for loose flower and cut flower separately, it is not possible to estimate the average national productivity. The area under flower cultivation has decreased from 3.24 lakh hectares in 2017-18 to 2.83 lakh hectares in 2021-22, with a significant from 2020-21 to 2021-22. Though the area under cultivation has decreased, the production of both loose flowers and cut flowers has increased from 2017-18 to 2021-22. Significant increase in the production of cut flowers, 30% over last 5 years, indicates that the area under cultivation for cut flowers has increased over the years.

Year	Area (ha)	Production – Loose (MT)	Production – Cut (MT)	Production – Tota (MT)
2021-22#	2,83,173	22,99,448	8,74,547	31,73,995
2020-21	3,22,021	21,51,957	8,93,316	30,45,273
2019-20	3,21,025	23,08,816	7,63,018	30,71,834
2018-19	3,03,208	22,63,197	6,46,528	29,09,725
2017-18	3,24,003	19,66,574	6,69,339	26,35,913

S. No.	States	Area (ha)	Production –	Production –	Production –
	States	Alea (lla)	Loose (MT)	Cut (MT)	Total (MT)
1	Tamil Nadu	42,932	5,71,233	67,261	6,38,494
2	Karnataka	44,827	4,39,217	1,39,037	5,78,254
3	Madhya Pradesh	38,690	4,33,657		4,33,657
4	West Bengal	30,042	74,946	2,19,584	2,94,530
5	Chhattisgarh	12,661	57,180	1,91,724	2,48,904
6	Andhra Pradesh	17,606	2,01,044	14,923	2,15,967
7	Gujarat	20,566	1,94,831		1,94,831
8	Uttar Pradesh	22,755	49,657	69,780	1,19,437
9	Maharashtra	11,925	73,365	41,731	1,15,096
10	Assam	5,307	35,592	59,252	94,844
	Total	2,83,173	22,99,448	8,74,547	31,73,995

Tamil Nadu is the leading producer of flowers in the country, producing 6.38 lakh MT in 2021-22. The top 3 States, Tamil Nadu, Karnataka, Madhya Pradesh, account for more than 50% of India's flower production.

The below table presents the top 10 States in terms of loose flower production and cut flower production. Maharashtra is the 7th largest producer of loose flowers and cut flowers. While Tamil Nadu is the top producer of loose flowers, West Bengal is the leading producer of cut flowers.

Loose Flower Production				Cut Flower Production	
S. No.	States	Production (MT)	S. No.	States	Production (MT
1	Tamil Nadu	5,71,233	1	West Bengal	2,19,584
2	Karnataka	4,39,217	2	Chhattisgarh	1,91,724
3	Madhya Pradesh	4,33,657	3	Karnataka	1,39,037
4	Andhra Pradesh	2,01,044	4	Uttar Pradesh	69,780
5	Gujarat	1,94,831	5	Tamil Nadu	67,261
6	West Bengal	74,946	6	Assam	59,252
7	Maharashtra	73,365	7	Maharashtra	41,731
8	Telangana	58,562	8	Odisha	33,683
9	Chhattisgarh	57,180	9	Andhra Pradesh	14,923
10	Uttar Pradesh	49,657	10	Uttarakhand	11,356
	Total	22,99,448		Total	8,74,547

Maharashtra's flower cultivation area and production show no clear trend in the last 3 years from 2019-20 to 2021-22.

Table 4: Maharashtra – Loose and Cut Flowers Production – 2019-20 to 2021-22				
Year	Area (ha)	Production – Loose	Production – Cut	Production – Total
Tear	Alea (lia)	(MT)	(MT)	(MT)
2021-22#	2,83,173	22,99,448	8,74,547	31,73,995
2020-21	3,22,021	21,51,957	8,93,316	30,45,273
2019-20	3,21,025	23,08,816	7,63,018	30,71,834
Source: Department of Horticulture, Government of Maharashtra				

Maharashtra is a minor producer of both loose flowers and cut flowers in India. Maharashtra's share in India's loose flower production is steadily increasing over the last 3 years from 2019-20 to 2021-22, while the share in cut flowers has decreased significantly from 11.48% to 4.77% in the same period.

Table 5: Maharashtra – Loose and Cut Flowers Production as % of India's Production – 2019-20to 2021-22				
Year	Production -	% of India's Loose	Production - Cut	% of India's Cut
rear	Loose (MT)	Flower Production	(MT)	Flower Production
2021-22#	73,365	3.19%	41,731	4.77%
2020-21	61,690	2.87%	65,595	7.34%
2019-20	57,007	2.47%	87,563	11.48%
Source: Department of Horticulture, Government of Maharashtra				

Pune, Satara, and Ahmednagar are the top flowers producing districts in Maharashtra. These 3 districts together account for 60% of the State's flower production in 2021-22.

	Table 6: Maharashtra – Top 10 Flower Producing Districts – 2021-22				
S. No.	States	Area (ha)	Production (MT)		
1	Pune	3,144	38,972		
2	Satara	1,248	16,094		
3	Ahmednagar	1,236	13,686		
4	Nagpur	903	9,175		
5	Nashik	501	7,706		
6	Sangli	627	5,660		
7	Jalgaon	287	3,225		
8	Akola	881	3,038		
9	Washim	255	3,018		

Table 6: Maharashtra – Top 10 Flower Producing Districts – 2021-22			
S. No.	States	Area (ha)	Production (MT)
10	Kolhapur	248	2,466
Total 11,925 1,15,096			1,15,096
Source: Department of Horticulture, Government of Maharashtra			

75% of cut flower production is concentrated in the top 3 districts, in which Pune alone accounts for more than 40% of the State's cut flower production. In loose flower, Pune accounts for 30% of the State's production.

Loose Flower Production			Cut Flower Production		
S. No.	Districts	Production (MT)	S. No.	Districts	Production (MT)
1	Pune	21,597	1	Pune	17,375
2	Satara	15,537	2	Ahmednagar	7,576
3	Ahmednagar	6,110	3	Nashik	7,322
4	Sangli	5,642	4	Nagpur	3,707
5	Nagpur	5,468	5	Amravati	1,745
Total 73,365			Total	41,730	

1.2.2 Important varieties

The table below provides a brief description of the major flowers cultivated in India. Apart from the flowers provided in the table below, other common flowers grown in India are Gerbera, Carnation, Orchids, Anthurium, and Tulip.

	Roses the most common type of flower cultivated across the world and has huge demand especially on festive occasions such as Christmas and Valentine's Day. In India,
Rose	roses are cultivated both as loose flowers and cut flowers. Loose rose flowers is widely utilized in temples and garland preparation. Rose come in various colour, with the most



	Table 8: Major Flowers in Ind	ia
	common one is red to reddish pink. Karnataka	
	is the top producer of roses in India.	
	Tube Rose is a fragrant flower and is	8
	cultivated both as loose flower and cut flower.	S & W &
	The loose flower variety in used in perfume	ALL CARE WILL
Tube Rose	industry, while cut tube rose are used as	the second second
Tube Rose	decorative flowers. Tube Rose is also known	
	as Rajanigandha in India. Karnataka, Tamil	
	Nadu, and West Bengal are major producers	A THE
	of this flower.	4
	Chrysanthemum, a loose flower, is majorly	
	grown in Andhra Pradesh, Karnataka, and	Contraction of the second s
Chrysanthemum	Tamil Nadu. It comes in different colours such	Sector Sector
	as white, yellow, pink, red, and purple. It is	and the second
	used in traditional festivals and weddings.	
	Jasmine, is a loose flower, that is widely	
	cultivated in the southern States. The flower	
	has high fragrance and is used in perfume	
Jasmine	preparation, home-use, and temple-use. The	
	flower is generally white in colour. Tamil Nadu	
	produces majority of Jasmine in India.	
	Marigold is common flower used in religious	
	ceremonies, decorations, and garlands.	
	Marigold commonly comes in orange, yellow,	A N N N N N N N
Marigold	and white in colour. The flower is cultivated	
	across the country and is the highest	MALE AND
	cultivated flower in terms of quantity of	
	production in India. Madhya Pradesh,	
	Karnataka, Andhra Pradesh, West Bengal,	
	Gujarat, and Uttarakhand are top producers.	

	Table 8: Major Flowers in Ind	lia
Gladiolus	Gladiolus is the second major crop cut flower produced in India. They come in various colours such as red, pink, white, yellow, and orange. They are primarily used for ornamental and flower arrangement purpose. Chhattisgarh is the major producer of this flower in India.	
Image Sources:		
Rose - <u>Roses are i</u>	ed and contributing to climate change, florists warn C	limate Crisis News Al Jazeera
Tube Rose - <u>Tuber</u>	<u>ose - Arka Vaibhav ICAR-Indian Institute of Horticultu</u>	<u>ıral Research (iihr.res.in)</u>
Chrysanthemum -	<u> Colorful Chrysanthemum Flower Stock Photo - Downlo</u>	ad Image Now - Chrysanthemum,
<u>Flower, Autumn - i</u>	Stock (istockphoto.com)	
Jasmine - <u>Morga, A</u>	Arabian Jasmine TheGreenyard.in	
Marigold - <u>Organic</u>	<u> Marigold Flower (orange) – GreenDNA® India</u>	
Gladiolus - How to	Plant and Grow Gladiolus Gardener's Path (gardener	rspath com)

1.2.3 Trade – International

India has exported flowers to 100+ countries in the last 5 years from 2018-19 to 2021-22, and 50+ countries in 2021-22. Exports are primarily of cut flowers, while the data does not specify clearly exports between cut flowers and loose flowers. In the year 2021-22, India exporter 88 thousand MT of flowers valued at INR 157 crores. Exports has remained constant between 2017-18 and 2021-22, where the exports dropped by 2017-18 to 2020-21, and then regained to 2017-18 levels in 2021-22.

Table 9: India's Flower Exports from 2017-18 to 2021-22*				
Year	Quantity (MTs)	Value (INR Crs)		
2021-22	8,820	157.5		
2020-21	4,827	101.66		
2019-20	6,222	126.44		
2018-19	7,137	149.67		
2017-18	8,144	158.11		
Source: Agricultural and Processed Food Products Export Development Authority (APEDA)				
* The quantity and value mentioned is the sum of figures for harmonized system (HS) codes – 06031100				
(Roses), 06031200 (Ca	arnations), 06031300 (Orchids), 060	31400 (Chrysanthemums), 06031500 (Lilies),		

06031900 (Other Cut Flowers), and 06039000 (Other Cut Flowers)

Roses dominate India's flower exports accounting for nearly 25% in value terms in 2021-22. Huge value of flowers are exported under "Other Cut Flowers" category, which could indicate flowers such as Gerbera, Tube Rose, Jasmine, and Marigold.

Table 10: India	Table 10: India's Exports in Value from 2017-18 to 2021-22 – Flower-wise (Cr)								
Flowers & HS Code	2017-18	2018-19	2019-20	2020-21	2021-22				
Roses (06031100)	57.95	57.46	47.96	27.44	36.75				
Carnations (06031200)	2.13	1.68	0.32	0.01	0.15				
Orchids (06031300)	0.04	0.00	0.00	0.02	0.02				
Chrysanthemums (06031400)	0.64	0.49	0.39	0.32	0.29				
Lilies (06031500)	0.10	0.06	0.07	0.01	0.11				
Other Cut Flowers 1 (06031900)	24.10	23.89	21.39	21.70	23.03				
Other Cut Flowers 2 (06039000)	73.13	66.08	56.29	52.13	97.07				
Total	158.09	149.66	126.42	101.63	157.42				
Source: APEDA	1	1	1	1	Source: APEDA				

Table 11: India's	Exports in Qu	antity from 201	17-18 to 2021-2	2 – Flower-wis	e (MT)
Flowers & HS Code	2017-18	2018-19	2019-20	2020-21	2021-22
Roses (06031100)	2517.48	2134.35	1613.79	853.91	1199.19
Carnations (06031200)	96.29	89.48	18.77	0.56	2.99
Orchids (06031300)	2.54	0.00	0.05	1.00	0.24
Chrysanthemums (06031400)	31.68	21.75	18.83	20.44	16.19
Lilies (06031500)	4.19	2.51	2.72	0.80	1.65
Other Cut Flowers 1 (06031900)	965.08	1412.32	1283.35	1432.21	3752.25
Other Cut Flowers 2 (06039000)	4526.58	3476.46	3284.92	2517.67	3847.36
Total	8143.79	7136.82	6222.36	4826.57	8819.86
Source: APEDA					

India exports flowers to all major markets such as Indian Sub-Continent, South East Asia, the Middle East, Europe, and North America. The top importing countries in terms of value and quantity differ significantly. The difference can be attributed to the mix of cut flowers and loose flowers in the exporting quantity as cut flowers are valued significantly higher than loose flowers.

In Terms of Quantity			In Terms of Value		
S. No.	Country	Quantity (MT)	S. No.	Country	Value (Cr)
1	Singapore	1917.83	1	United States of America	41.6
2	Bangladesh	1445.97	2	Malaysia	16.13
3	Nepal	1332.48	3	Singapore	15.47
4	United Arab Emirates	916.31	4	United Arab Emirates	15.07
5	Malaysia	839.47	5	United Kingdom	12.86
6	United States of America	769.96	6	Netherland	5.53
7	United Kingdom	248.17	7	Nepal	5.5
8	Kuwait	157.36	8	Canada	3.73
9	Canada	128.17	9	Kuwait	3.7
10	Saudi Arab	124.21	10	Germany	3.53

The 5 exports destinations for flowers from India, both in terms of quantity and value, are provided in the tables respectively. Singapore has remained the top importer in terms of quantity and Bangladesh and Nepal have started importing in large quantities over the last 2 years from 2020-21.

Table 13: Top 5 Export Destinations in terms of Quantity from 2017-18 to 2021-22				
2017-18	2018-19	2019-20	2020-21	2021-22
Singapore	Singapore	Singapore	Singapore	Singapore
UK	Malaysia	UAE	Nepal	Bangladesh
Malaysia	UAE	Malaysia	UAE	Nepal
UAE	UK	USA	Malaysia	UAE
USA	USA	UK	USA	Malaysia
Source: APEDA				

USA, UK, UAE, Singapore, and Malaysia have remained the top importers in terms of value over the last 5 years from 2017-18 to 2021-22.

Table	Table 14: Top 5 Export Destinations in terms of Value from 2017-18 to 2021-22				
2017-18	2018-19	2019-20	2020-21	2021-22	
UK	USA	UK	USA	USA	
UAE	UK	UAE	UAE	Malaysia	
USA	Malaysia	USA	UK	Singapore	
Singapore	Singapore	Malaysia	Singapore	UAE	
Malaysia	UAE	Singapore	Malaysia	UK	
Source: APEDA	A				

The export trend in terms of quantity and value for the top 5 importers of flowers from India are the provided in the below tables, respectively.

Table 15: Ex	Table 15: Export Trend for Top 5 Export Destinations in terms of Quantity from 2017-18 to 2021-				
		2	2 (MT)		
Country	2017-18	2018-19	2019-20	2020-21	2021-22
Singapore	1955.07	1991.27	2018.39	1391.73	1917.83
UAE	705.3	755.01	822.84	629.13	916.31
Malaysia	790.76	855.51	808.03	491.66	839.47
USA	696.37	637.97	533.21	482.05	769.96
UK	1295.15	725.19	497.67	219.43	248.17
Total	8,144	7,137	6,222	4,827	8,820
Source: APE	DA				

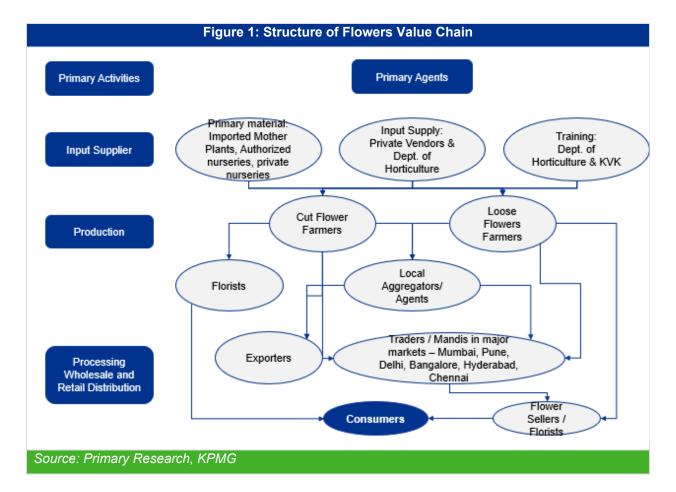
Table 16: Export Trend for Top 5 Export Destinations in terms of Quantity from 2017-18 to 2021-22 (Cr)					
Country	2017-18	2018-19	2019-20	2020-21	2021-22
USA	16.75	23.35	16.65	16.64	41.6
UK	30.84	22.17	19.27	12.33	12.86
UAE	17.77	14.12	17.93	16.18	15.07
Malaysia	13.23	15.19	15.83	8.77	16.13
Singapore	15.27	14.7	12.53	11	15.47
Total	158	150	126	102	158

1.2.4 Trade – Domestic

Comprehensive data on domestic trade of flowers – arrivals and prices in Government regulated *Mandis* – is not available on the AGMARKNET portal of Government of India.

1.2.5 Value Chain Overview

In Maharashtra, flowers tend to have a shorter value chain due to their high perishability. Cut flowers, through have higher shelf life, still have shorter value chains, since the number of producers are less and concentrated.



2 Marketing Strategy

Individual farmers and FPOs face issues in accessing profitable markets for their produce. Key challenges for them are their remote locations, high transportation costs, limited market information / knowledge of requirements, and the lack of business skills. The following market strategy has been prepared with a focus on providing information that helps FPOs in accessing reliable and profitable markets, while ensuring their produce meets market standards. In addition, it is envisaged that the FPOs have better bargaining power, some of the value chain activities are shifted towards them and there is a win-win situation for both FPOs and associated value chain actors / market players. Also, while providing information on opportunities, associated risks have also been highlighted. Prior to a detailed market segment-wise strategy, some of the common and cross-cutting interventions that are required at the end of FPOs for better market access are given below:

Commodity resource mapping and Know Your Farmers (KYF): FPOs should keep information on acreage of cultivable land under different crops, approximate marketable crop available with the farmers in the season, etc. This will help FPOs to have an idea of the volumes to be handled in the season and plan to effectively market their produce eventually.

Aggregate large volumes of produce: FPOs can establish long-term business relationship only if they are able to consistently supply sufficient quantity of produce, as per the buyer requirements. FPOs can increase procurement catchment area to consistently meet minimum requirement quantities.

Flexibility with payment terms: Many market segment function on credit cycle, which can vary from as low as 5-7 days to as high as 30-60 days. FPOs should have sufficient working capital to meet credit cycles and farmer payments.

Have good market intelligence: FPOs should have good market intelligence to decide on store / sell decisions and to determine which market to send the produce to. Market intelligence can be collected through online sources such as Government data and news articles, and through on-ground network of contacts in different parts of the country. Keeping a tab on market situations in target export markets will help FPOs in market entry and expansion.

Appointment of manager: FPOs can appoint a manager for its market linkage business. This will help in better sales planning, coordination with buyers for purchase and payment timelines. It can also appoint a manager for procurement activities. For FPOs to expand its business and supply to more buyers, it is necessary to have strong procurement, and appointment of manager can help in establishing the same.

Diversify supply options: All types of markets and customers come with both opportunity and risks for FPOs. This document also details on potential risks that FPOs might face in each market. To mitigate risks, FPOs should ensure that it deals in multiple markets and with multiple customers in each market. In addition, to get quality commensurate pricing, FPOs need to supply each market with its required quality of produce.

This section details out the strategy that the FPOs can adopt to supply Flowers (both Cut Flowers and Loose Flowers) in the major market segments, namely, 1) Export Markets, 2) Florists, and 3) Domestic Markets. Key components of this section are:



2.1 Export Markets

Flowers, primarily cut flowers, are exported from India to the Middle East, South East Asia, Indian Subcontinent, Europe, and North America. For flower varieties grown in Maharashtra, only cut flowers are currently exported. Hence, this sub-section will focus primarily on cut flowers.

Other cut flowers indicated in this section are cut flowers other than roses, carnations, orchids, chrysanthemums, and lilies. This is followed as per the categorization of HS codes on which export data is tracked.

2.1.1 The Middle East

The Middle East market includes countries such as United Arab Emirates (UAE), Saudi Arabia, Iran, Oman, Egypt, Qatar, Iraq, Kuwait, Syria, Israel, Jordan, and Bahrain.

2.1.1.1 Characteristics of the Segment

Many countries in the Middle East are high income economies and have good demand of cut flowers for ornamental purpose.

In the Middle East market, UAE is the top importer of flowers from India. Other countries in the region that import good value of flowers from India are Saudi Arabia, Kuwait, and Qatar. The Middle East market

imports is dominated by roses, as with most other markets importing from India. The Middle East market is the top importer of carnations, chrysanthemums, and lilies from India.

2.1.1.2 Competition

Other Indian States:

Tamil Nadu, Kerala, and Karnataka are the top exporters to the Middle East market from India. Karnataka is the top exporter of cut roses and chrysanthemums to the Middle East. Karnataka, Tamil Nadu, and Kerala also export huge quantities of other flowers such as loose rose and other loose flowers to the Middle East market.

Maharashtra's export of flowers to the Middle East market is limited. This could be due to the existing presence of strong supply from Karnataka, Kerala, and Tamil Nadu. Their significantly higher productions also help in supplying the required quantities consistently to the Middle East market.

Other Countries:

The Netherlands is a major exporter of cut flowers to the Middle Eastern countries, followed by Kenya, Ecuador, Colombia, and Ethiopia. Small scale exports from Thailand and Malaysia is also prevalent. Cut roses have the biggest consumption, which the Middle East market does not import from India in good quantities. Cut roses are supplies mainly from the Netherlands along with carnations, lilies, orchids, and chrysanthemums.

Controlled cultivation for flowers is picking up in the Middle East countries such as UAE. UAE is cultivating roses in greenhouses, and is also exporting them to the Netherlands.

2.1.2 Southeast Asia

Vietnam, Thailand, Singapore, Malaysia, Indonesia, Cambodia, Laos, Myanmar, Philippines, Brunei, East Timor are the countries part of the Southeast Asia region.

2.1.2.1 Characteristics of the Segment

Most Southeast Asian countries are middle income economies and have purchasing power similar or slightly higher to that of Indian markets.

Singapore and Malaysia are the major importers both in the Southeast Asian market and across the world of flowers from India. High presence of Indian diaspora along with cultural similarities make these markets top importers of flowers from India. Both these countries import large quantities of cut roses and other cut and loose flowers. Among loose flowers, roses and jasmine are imported in these 2 countries. The average

value per kg of flowers exports to these countries is well below the overall average, indicating that the flower exports are dominated by loose flowers.

Philippines and Thailand also import limited quantities of flowers from India, primarily cut roses.

2.1.2.2 Competition

Other Indian States:

Karnataka is the top exporter of flowers to the Southeast Asian markets. 50% of its exports to this market are driven by cut roses, while the rest are other cut flowers and some loose flowers.

Tamil Nadu closely follows Karnataka in exports to Southeast Asia market in terms of quantity, while lags behind in terms of value. This indicates that Tamil Nadu's exports to this market is largely driven by loose flowers, which are of lower value in comparison to cut flowers. Tamil Nadu majorly exports jasmine and loose rose to Singapore and Malaysia.

Other Countries:

Thailand, Indonesia, Vietnam, Philippines, and Malaysia all produce cut flowers as they have regions with favorable climatic conditions for flower cultivation. Roses, orchids, chrysanthemums, anthuriums are some of the commonly cultivated varieties in these countries. Hence, export to the Southeast Asian market is restricted to Singapore and Malaysia. In these countries too, India exports primarily loose flowers and cut roses.

2.1.3 Europe

Europe market includes member countries of the European Union and United Kingdom (UK). Major member countries of European Union that trade floriculture commodities with India, are the Netherlands, Germany, France, Spain, Poland, Ireland, and Italy.

2.1.3.1 Characteristics of the Segment

European countries, especially the Western Europe countries, are developed economies with high purchasing power. Usage of flowers is driven primarily by gifting and decorations for ceremonies.

UK is one of the top importers of flowers from India. The country imports cut roses, other cut flowers, and some loose flowers from India.

The Netherlands is the second largest importer of flowers from India in Europe. The country, as the top trading hub for flowers across the globe, is a good market for high-end premium flowers from India. Flowers

export to the Netherlands are not necessarily for consumption in the country, unlike other importing countries. Flowers from India are sent for the auction process, which are then further re-exported across Europe. Cut roses and other cut flowers are exported the Netherlands from India. Royal FloraHolland at Aalsmeer, near Amsterdam, is the largest auction house for flowers in the world.

Germany and France also import flowers, mainly other cut flowers, from India in good quantities. Other countries in Europe importing in small quantities are Spain, Poland, Ireland, and Italy.

India and Maharashtra's exports to the UK and the EU has declined significantly over the last 5 years. This can be attributed to issues in quality of flower and focus shifting to less demanding and less competitive markets such the Middle East and the Southeast Asia.

2.1.3.2 Competition

Other Indian States:

UK: Maharashtra is the top exporter of cut roses to UK, followed by Karnataka. Cut roses exports are exported only from Maharashtra and Karnataka for the last 3 years in considerable quantities. Hence, Maharashtra competes with Karnataka for exports to UK. Other cut flowers and loose flowers are exported in small quantities from Kerala and Tamil Nadu. Both Maharashtra and Karnataka have seen drastic decline in export of cut roses to the UK.

EU: Exports to EU markets, though limited from India in comparison to UK and other markets, is dominated by West Bengal and Tamil Nadu. Maharashtra also exports other cut flowers, in limited quantities, to the EU and does not face any competition from other States.

Other Countries:

Many countries in Europe cultivate flowers in large scale, with the Netherlands being one of the largest producers of flowers. There is significant trade among different European countries on flowers. The Netherlands is the trading hub, that imports from multiple countries and re-exports to other countries with Europe.

Apart from the countries within Europe, Kenya, Ecuador, and Ethiopia are large scale exporters to the UK and Europe Union. Kenya with its large scale roses cultivation along with the advantage of geographical proximity and freedom from quota restricts and reduced duty, is increasing its presence in the Europe markets.

2.1.4 North America

United States of America (USA), Canada, and Mexico comprise the region of North America.

2.1.4.1 Characteristics of the Segment

USA and Canada are developed economies with high purchasing power and good Indian diaspora population. Flowers demand is primarily for usage in gifting and decorations for ceremonies such as weddings.

USA is the top imported of flowers from India in terms of value of imports and 6th in terms of quantity of imports. The country imports premium flowers from India, with the per kg rate of imports the highest among the top 20 importing countries. Unlike other major importing countries, USA does not import good quantities of cut roses from India, but imports flowers under the other cut flowers and loose flowers category.

Canada is among the top the 10 importing countries, both in terms of quantity and value of flowers, from India. Similar to USA, imports to Canada are driven by other cut flowers and loose flowers.

Mexico does not import considerable quantity of flowers from India.

2.1.4.2 Competition

Other Indian States:

Tamil Nadu is the top exporter of flowers to North America in terms of quantity, while Kerala is the top exporter in terms of value. Tamil Nadu's export's per kg value is on the lower side indicating that it primarily exports loose flowers to this market. West Bengal is also a competing state, as it is the 3rd largest exporter followed by Maharashtra to the North American market. West Bengal exports are on a declining trend, which presents Maharashtra with an opportunity to take its share in exports.

Though export of cut roses to this market is in limited quantities, Maharashtra is the largest exporter in this category.

Other Countries:

Ecuador and Colombia have high market share in the export of flowers to USA, wherein it has captured nearly 80% of market for cut roses. Both the countries enjoy geographical proximity leading to lower logistics cost and also favorable trade terms such as free-trade facility with USA. Many suppliers in Ecuador are FlorEcudar certified, which certifies on good working conditions, no harm to environment, correct usage of pesticides, etc. Due to favorable climatic conditions, cut roses are grown in open fields significantly reducing cost of cultivation.

2.1.5 Maintaining Quality Standards and Supply to above Export Markets

All the above markets require high quality premium grade flowers for exports. Since the primary purpose of flowers is for ornamental usage, the physical appearance including freshness are the deciding factors for acceptance of exports and subsequent pricing.

Cut rose is the only flower that is grown and exported in considerable quantity in Maharashtra. The export grade quality parameters are detailed in the table below.

Physical Appearance	 Petals should be intact and should not be unfolded when harvesting Uniform colour across the petals Flowers should be damage free Long stem – more than 40 cm is preferred Red is the high volume colour. Pink and White roses are also demanded
Post-Harvest Activities	 Pre-cooling is mandatory immediately after harvest to preserve freshness Cold storage is required during storage at packhouse and further transportation
Packaging	 A bunch consists of 20 stems Each bunch should be wrapped with 3-ply soft corrugated paper that protects the flower bud Secondary packaging in corrugated cardboard boxes with 30 bunches or as per customer requirement

UNECE has published standards for exporting of cut flowers. These standards are acceptable across various markets for cut flower trade.

	The produce in this class must be of superior quality They must have the
	characteristics of the species and of the variety. All parts of the produce
Extra Class	must be
(3% tolerance on class	Free from damage caused by parasites of animal or vegetable origin
specification; 10%	Free of visible extraneous matter affecting the appearance
tolerance on size code	Unbruised
specifications)	Free of defects of development
	Stems must be, according to species and variety (rigid and strong
	enough to support the flowers

Class I (5% tolerance on class specification; 10% tolerance on size code specifications)	 The produce in this class must be of good quality. They must have the characteristics of the species and of the variety (cultivar). All parts of the produce must be: Practically free from damage caused by parasites of animal or vegetable origin Practically free of visible extraneous matter affecting the appearance Unbruised Practically free of defects of development Stems must be, according to species and variety, sufficiently rigid and strong enough to support the flower
Class II (7% tolerance on class specification; 10% tolerance on size code specifications)	 This class comprises produce which do not qualify for inclusion in the higher classes but satisfy the minimum requirement specified above. The produce may have the following defects: Slight damage caused, for example by disease, parasites, treatment products, etc. Slight visible extraneous matter Slight bruising Slight malformation Less rigid and strong stems The defects permitted must not impair the keeping quality, appearance or utility of the products
Size	Size code is dependent on length of the flower – bud + stem. Size 0 – less than 5 cm or flowers marketed without stems Size 1 – 5-10 cm Size 2 – 10-15 cm Size 100 – 100-120 cm Size 120 – more than 120 cm
Packaging	 Packaging should sufficiently protect the flowers and material used should be new and clean Unit of presentation (box, bunch, bouquet) must consist of 5, 10, 15, or multiples of 10 number of pieces (not applicable when sold as single stem or by weight)

Europe market requires phytosanitary certificate for export of flowers. Exporting to the Netherlands, especially the auction houses, require additional certifications and compliances. Daughter plants (plants that are planted by growers on field) that are grown from mother plants provided by breeders certified by

the Netherlands require a royalty to be paid to the breeder. Only certified growers are then allowed to participate in the auction process. More Profitable Sustainability (MPS) certification, a certification that encourages sustainable cultivation practices in flowers, provides added advantage with exporting to the Netherlands. Certifications such as Fairtrade and Global GAP can also help growers increase export share in European markets.

Flowers are exported by air to UK and other European markets and both by sea and air to the Middle East market. When exporting by sea, it is mandatory that the flowers are exported in reefer containers with 2-4°C temperature range.

Growers / FPOs planning to export flowers should invest in integrated cold chain facilities. This requires pre-cooling facility, temperature controlled packhouse, cold storage, and reefer truck. Though cut flowers have good shelf life, high retail shelf life is required and flowers should be fresh at retail-level. This necessitates, preserving the shelf life and freshness till the flowers reach the retailer / florist through integrated cold chain.

To establish good export markets, growers / FPO should be able to consistently supply throughout the year, since production is throughout the year. Growers / FPO should also have high supply ability during peak demand weeks. For supplying during peak demand, harvest planning is required to be done yearly. Yearly harvest planning is also required for FPOs to be able to consistently throughout the year. Since, most cut roses are grown in polyhouses in Maharashtra, harvests are not highly seasonal and can be done throughout the year except for times of peak summer and high rains. The table below indicates key festivals in Europe and USA where there is high demand for flowers. Apart from these, there could be days specific to a country such as King's day in the Netherlands.

Festival	Period	Festival	Period of supply
New Year's day	January 1	Easter	Between March third week and April last week
Valentine's day	February 14	Mother's day	UK – usually in March USA and other countries – second week of May
International Women's day	March 8	Christmas	December 25

Growing cut flowers in packhouses requires good technical expertise since it involves maintaining micro climate, pesticide / insecticide sprays at right time, pruning at right time and in right branches, and maintaining temperature post-harvest. Since flowers are highly sensitive to handling and export markets require no handling damage, growers / FPOs wanting to export should train their staff / labour on handling and packaging practices. This would avoid common damages such as breaking of bud and stem.

2.1.6 Pricing for above Export Markets

Pricing for growers looking to export from Maharashtra is determined by the prevailing export prices in major exporting states – Karnataka and Tamil Nadu. It is also determined by the prevailing market prices in the importing countries. For example, the prices in Europe markets are lower during summer months due to high production within the European countries.

Pricing for cut flowers is determined per stem / piece basis, while for loose flowers, it is based on weight basis. Maharashtra exports only cut roses in good quantities and the potential for exports is also more in cut roses. For cut rose, the higher price range per stem is ₹30-40 and lower price range per stem is ₹20-30. The higher price range is prevalent during weeks of high export demand – Valentine's week and Christmas week.

Exporting would also require incurring costs on compliance and post-harvest activities. On average, postharvest activities from harvest to cold storage costs ₹0.15-0.25 per stem. Phytosanitary certification costs approximately ₹5000 per 500 kg. Breeder certified plants require royalty payments which can cost between 1-1.5 Euro per plant. Transportation costs by air to the UK and Netherlands is between ₹6-10 per stem, and to Dubai, it is ₹2-4 per stem.

2.1.7 Establishing Connects

To export produce it is necessary to understand the major export routes and to establish connects with relevant companies / personnel. The selection of export route for an FPO should be done as per the quality of produce available for export, human capital to handle export related compliances, financial capabilities, and risk-taking ability.

Export Route	Description
	Companies / individuals specialize in exporting of floriculture, agriculture, and
	horticulture commodities to specific export markets. Growers / FPOs can
Through an exporter	supply produce as per required quality specifications to the exporters. The
from India	exporters buys the products from Growers / FPOs and then exports the
	products.
	Many large scale growers also act as exporters for flowers. Growers / FPOs
	can also reach out to these growers for exports.
Through an importer	Growers / FPOs can identify importers in the importing country. Importers are
at the importing	companies / individuals that obtained the necessary permissions in the
country	importing country to import specific agriculture and horticulture commodities.

Exports can be done through two routes:

Growers / FPOs with sufficient cultivation experience, can directly reach out to
importers for exports since unlike importers of agriculture and horticulture
produce, importers of floriculture products are fewer in number.

Export Route	Establishing Connects		
Through an exporter from India	 Trade fairs (physical and virtual) conduct by APEDA. Details are published on https://apeda.gov.in/apedawebsite/trade_promotion/International_trade_event Other National Trade Fairs conducted by various Organizations / Association. These events are published on various platforms such as: <u>https://krishijagran.com/events</u> Online trade websites such as <u>www.indiamart.com</u> and <u>www.exportersindia.com</u> Buyer-Seller meets organized under the MAGNET project 		
Through an importer at the importing country	 Trade fairs (physical and virtual) conduct by APEDA. Details are published on https://apeda.gov.in/apedawebsite/trade_promotion/International_trade_event Other National Trade Fairs conducted by various Organizations / Association. These events are published on various platforms such as: <u>https://krishijagran.com/events</u> International Trade Fairs such as: International Floriculture Trade Fair in Amsterdam – Fair for 2023 is scheduled for 8 to 10 November Production region specific trade fairs are also conducted such as HortiFlor Expo in Kenya Proflora in Columbia International events on floriculture trade are regularly published on the website of CBI – a centre for promotion of imports from developing countries to Europe. www.cbi.eu/events 		

2.1.8 Advantages and Risks Associated

Each export route mentioned in the above sub-section comes with its risks. Not all export route is suitable for all growers / FPOs, and it is necessary for growers / FPOs to understand the risks before pursuing exports through any of the routes.

Export Route	Risks / Disadvantages	Advantages
Through an exporter from India	 Significant margin from the final export price is taken by the exporter FPOs cannot make significant export-oriented investments as export orders may not be assured. Exporters can procure equivalent quality from any other seller at lower prices, if available 	 Exporting through this route is suitable for all FPOs, especially for FPOs that handle small quantities Payment terms from exporters to FPOs can be for shorter credit time Export compliance is handled by the exporter – only quality adherence is taken care by FPOs
Through an importer at the importing country	 FPO should be able to send the minimum required quantity per consignment consistently. This is possible only through strong procurement (from its member farmers, and other growing regions) Payment default by importers in case the FPO does not take precautionary measures like Letter of Credit Credit timelines for payment from the importer can be as high 30 to 60 days FPO requires proper and complete knowledge on export compliance requirements of the importing country 	 Higher margins Long-term business opportunity. FPO can become an exporter for other FPOs / market players Flowers is usually exported in small quantities on regular basis – growers / FPOs with less cultivation but with required quality can also export

2.2 Florists

Florists markets include organized florists / retailers and also stand-alone florists in various cities across the country.

2.2.1 Characteristics of the Segment

Florists are primary consumer of cut flowers in India. Florists serve a variety of customers from direct consumers buying from road-side florists / florist shops to hotels to wedding decorators. Florists also directly take part in decorations for weddings and other festivities. Florists buy majorly cut flowers and have good knowledge on the flowers they regularly deal in.

Fern N Petals, Flower Aura, Bloomsvilla, Archies, Arena Flowers, BookMyFlowers, and Winni are some of the major florist chains that are present across multiple cities in India.

2.2.2 Competition

Florists buy directly from producers and aggregators, and also from *Mandis*. They are generally aware on quality of flowers from different production regions as per seasons / months and prefer to buy accordingly.

For Maharashtra:

Bangalore is a major supplier of cut flowers to Pune and Mumbai, as it is one of the largest cut flower production regions in the country.

For Other States:

Maharashtra cut flower producers primarily sell to cities in northern India such as Delhi, Madhya Pradesh, Rajasthan, Bihar, and Uttar Pradesh.

Maharashtra's producers selling to florists in the Southern cities such as Chennai, Bangalore, Hyderabad, and Kochi is limited. This is because of large cut flower production in Karnataka and Tamil Nadu.

2.2.3 Maintaining Quality Standards and Supply

Florists sell to various types of customers, hence buy from Grade A and Grade B flowers. Since flowers are graded on physical appearances only, the quality parameters lean towards criteria for rejection than on criteria for acceptance, such as:

- Missing petals
- Damaged bud / petals / flower
- Short stem
- Unrigid stem
- Off colour / non-uniform colour
- Dryness / lack of freshness

Cut flower demand from florists is higher during wedding months / periods, and during Christmas and Valentine's day week. Growers and FPOs should be able to supply to the increased demand from florists during these period to have a steady market / business with them. Hence, this requires understanding the yearly requirement of each florist / florists in each region that the grower / FPO intends to supply and planning the pruning / harvest schedule of the flowers months in advance.

Growers / FPOs in Maharashtra should focus on establishing ties with florists in Delhi, Rajasthan, Madhya Pradesh, and Uttar Pradesh due to geographical proximity in comparison to southern States – major cut flower producing regions. Supply to these markets can be done by trains cost efficiently. Special air conditioned coaches are available from Pune railway stations for supply of flowers to key markets such as Delhi.

Cut flowers require integrated cold chains for supply to florists to ensure freshness at delivery and long shelf life at retail point (vase shelf life). Growers / FPOs should this establish pre-cooling chambers, temperature controlled packhouses, cold storage, and reefer truck facilities to supply good quality cut flowers to high end florists. An appropriate strategy would be to for the growers / FPOs to target both export markets and florists with the same infrastructure.

Supply of loose flowers to florists is limited as the demand is primarily for cut flowers. Growers / FPOs that purely deal in loose flowers may not find majority of florists attractive option due to limited demand.

Individual florists might have limited demand which would make it unviable for growers / FPOs to deliver. Hence, FPOs should target cities where they want to market their produce and tie up with multiple florists for optimal order quantities. Tie up with national brands and delivering to shops / warehouses in region near the grower / FPO's presence is also a viable long term business association.

2.2.4 Pricing

Florists function under the prevailing domestic market prices of cut flowers which is determined at major cultivation regions. The purchasing price of florists is provided in the table below. Prices vary on supply shocks such as shortage of supply from key cultivation regions and in periods of high demand.

Flower	Peak Demand Prices (per stem)	Normal Demand Prices (per stem)
Rose	₹10-20	₹5-10
Gladiolus	₹6-8	₹4-6
Gerbera	₹6-8	₹4-6
Tuberose	₹10-15	₹8-10
Carnation	₹5-7	₹3-5
Source: Primary Research		

Growers / FPOs would also incur costs on post-harvest activities of ₹0.1-0.2 per stem. Growers / FPOs should also account in for transportation costs – either by rail, air, or road, when determining selling price for the flowers.

2.2.5 Establishing Connects

Growers can establish direct connects with major florists in different cities across the country. Many florists are listed on trade websites such as IndiaMart and TradeIndia. Growers can search use these platforms to understand the requirement of different florists and establish connects with them.

Flower Bazaar (<u>Flower Bazaaar India's only Online Flower Market Place, Flower Bazaar</u>) is an online marketplace specially for trading of flowers. This can provide an appropriate platform for growers / FPOs to get in touch / make transactions with florists across the country.

A list of florists in different cities published by National Institute of Post-Harvest Technology, Talegaon is provided in *Annexure 1*.

2.2.6 Advantages and Risks Associated

Florists are aware of the market dynamics and can provide good prediction on supply requirements months in advance. This can help the growers / FPOs to plan their harvest schedule accordingly, and supply consistently. Since florists buy a wide variety of flowers, association with them can also help growers / FPOs diversify their cultivation and reduce risks.

Florists procure all major cultivation regions and hence can procure at the cheapest prices possible, especially large scale florists and retail chains. This provides limited pricing power to growers / FPOs.

2.3 Domestic Markets

Domestics markets are Government notified Mandis and flower traders across India.

2.3.1 Characteristics of the Segment

Domestic markets consume all species / varieties and grades of flowers – both cut and loose. This is due to its wide range of customer segment from exporters to florists to road-side flower sellers. The demand for flowers from domestic market is high during Hindu religious festivals and wedding seasons. Roses see high demand during Christmas week and Valentine's week. The pricing is based on the supply demand dynamics.

Access to different domestic markets across the country can be beneficial to FPOs as they can act as good hedge against price risk. Lower prices in one region do not translate to low prices in another region. Hence, FPOs can sell their produce across different domestic markets.

2.3.2 Competition

Maharashtra is not among the top producers of both cut flowers and loose flowers in the country. The states producer large quantities of cut rose and marigold (loose flower). In cut rose, it is among the top 5 producers in the country, while in marigold it is a minor producer.

Maharashtra competes with Karnataka and West Bengal for cut rose domestic market. Karnataka supplies across the country and dominates the southern markets. Maharashtra, which supplies cut roses mainly to northern markets such as Delhi, Rajasthan, and Uttar Pradesh faces competition from Karnataka. Uttar Pradesh also has large production of roses, those as loose flowers, competes with cut roses from Maharashtra in the Northern markets. West Bengal is also a key player in supply of cut roses to the Northern markets.

Maharashtra is a net importer (from other States) of marigold, and other loose flowers like Chrysanthemums and rose. Marigold, a major flower used in Maharashtra, comes from Gujarat, Madhya Pradesh, West

Bengal, and Karnataka. For Maharashtra to be competitive in loose flowers domestic market, it has to significantly increase production.

2.3.3 Maintaining Quality Standards and Supply

Domestic markets accept all grades of flowers. Since there are multiple types of flowers, both cut and loose, the classification on grading can be provided in terms of acceptable deviations from the top quality produce. Common quality parameters that flowers are rated on and based on which a buyer in domestic markets makes decision on quality of the flowers are:

- Intactness of the bud / flower
- Freshness
- Stem length and rigidity (cut flowers)
- Fragrance (loose flowers)
- Uniformity in colour
- Adherence to colour of the variety (such as reddishness of red roses)
- Visual damage

Growers / FPOs cultivation and dealing in cut flowers may supply to domestic markets flowers only after their best produce is sold though export and florists marketing channels. The investment required for integrated cold chains may not compensate for the comparatively lower prices received in domestic markets.

Since loose flowers from a field are harvested multiple times a week for a specific window, FPOs should plan to harvest among its farmers to ensure that it is able to supply consistently to its buyers during the season. It is also necessary to plan planting and harvesting of loose flowers to in line with high demand festivals – both nationally and regionally, and also for regional wedding seasons. The table below provides a list of festivals in India and Maharashtra during which there is high flower demand.

Across India	Specific to Maharashtra
Diwali	Ganesh Chaturthi
Navratri / Dussehra	Gudi Padwa
Christmas	Krishna Janmashtami
Valentine's Day	

Loose flowers frequently face price crashes due to oversupply during peak harvest periods. To tide over such periods, FPOs can utilize low cost cold storage options / renting of cold storage to store its flowers for few days.

2.3.4 Pricing

Pricing in domestic markets depends on the day-to-day supply-demand dynamics. Cut flowers prices are determined by the supply dynamic in different production clusters, while loose flowers are traded in good quantities in *Mandis* where the price is determined. Prices for cut flowers in domestic markets are slightly lower than those provided by florists in normal supply-demand days. In case unusual increase or decrease in supply or demand in the markets, prices can significantly increase or decrease. Prices for cut flowers are provided in the above sub-section *2.2.4*. Prices of various loose flowers in Pune market (the largest flower market in Maharashtra) cultivated in Maharashtra is provided in the table below.

Flower	Peak Demand Prices (per kg)	Normal Demand Prices (per kg)
Tuberose	₹80-120	₹50-60
Marigold	₹80-120	₹40-50
Chrysanthemum	₹75-100	₹40-50
Source: Primary Research		

The price of all agriculture and horticulture commodities traded in the Government regulated *Mandis* can be tracked on <u>www.agmarknet.gov.in</u>. The tracking of arrivals and prices for flowers is limited on the website. Hence, FPOs should actively work to establish source for information on prevailing market prices in markets that it targets to sell its flowers to.

2.3.5 Establishing Connects

Since Maharashtra is a net importer of flowers, except for cut roses, growers / FPOs can aim to establish connects with traders within the State. Connects with these traders can be done by seeking help from other FPOs or growers dealing in flowers of same varieties in the region.

IndiaMart and TradeIndia are online platforms available to discover new buyers across the country. Many traders list their requirement on such platforms. Flower Bazaar (<u>Flower Bazaaar India's only Online Flower</u> <u>Market Place, Flower Bazaar</u>) is an online marketplace specially for trading of flowers. This can provide an appropriate platform for growers / FPOs to get in touch / make transactions with traders across the country.

2.3.6 Advantages and Risks Associated

Selling to major domestic markets decreases the price risk significantly. When prices are low in nearby markets, FPOs can sell their produce to other domestic markets wherever feasible. Consistent supply to select traders is necessary for FPOs to build long-term relationship with buyers. This acts as a significant hedge against price variations in the nearby markets.

Sending produce to distant markets without proper connections on credit can lead to payment default risk. Cut flowers cannot be remuneratively marketed only to domestic markets since it grown in packhouse (high cost of cultivation) and also has post-harvest costs. Domestic markets can only be a secondary channel for cut flowers while the primary channels are exports and florists.

Annexure 1: List of florists

List of few florists in Maharashtra and other key flower markets across the country. Details published by National Institute of Post-Harvest Technology (NIPHT), Talegaon, Pune.

S. No.	Florist Details
	Raju Paigude
1	Market Flower Bazaar, Gutlekdi, Pune – 37 +91-98223599050
2	Sandip Kamthe Market Flower Bazaar, Gutlekdi, Pune – 37 +91-9422078823
3	Flower Point (Rajkumar) Bhuleshwar Old Fulgalli, 26 Maruti Lane, Mumbai – 04 +91-9322229765
4	Tatya Kamthe Market Flower Bazaar, Gutlekdi, Pune – 37 +91-9822222777
5	Pooja Florist Bangali Market, Near Krishna Road, New Delhi – 01 011-3716432
6	Indian Flora (Pravin Bhoj) Phool Mandi, Baba Kharajsingh Marg, Connaught Place, New Delhi +91-9818194376, +91-9423263583
7	Nikhil Bhoite Old Flower Market, Bhuleshwar, Mumbai 022-2423373
8	Mauli Flower & Ankit Flower Shop No. 1,2, CPK Bank Building, SB Dadar, Mumbai – 28 022-24312212, 022-24339408
9	Sunil Flora Traders Shop No. 6, New Fulgali, Bhuleshwar, Mumbai – 28 022-22414236, 022-22419235
10	Thakur Flowers 15/16 (A) Vijaynagar, Senapati Bapat Marg, Dadar, Mumbai – 28 022-24309897
11	Bhoite Flowers (Tulasiram Bhoite)

	13-A, Upendiranagar, Senapati Bapat Marg, Dadar, Mumbai – 28
	Dinesh Flora (Dinesh Singh)
12	Malpravah Prakriya Kendra, No. 4, Gala No. 14, Opp. to Sunder Nagar Building, Dadar,
	Mumbai – 28
	Sreyash Blooms (Chander Saraogi)
13	Office – 4005, Raghu Ganj, Chawari Bazaar, Delhi – 06
	011-2227745
	Orchid Florist
14	Sec. No. 9-1-7-83487, Next to Corporation Bank, Sardar Patel Road, Secunderabad – 26
	040-6212233, 040-6210902
	Indus Flora Base Ltd.
15	1225 A Wing, 14 th Floor, Mittal Tower, MG Road, Bangalore – 01
	080-5598117
	Navrang Flowers
16	Mohmad Masjid Ali, New Osman Ganj, Hyderabad
	040-24654182, 9849058280
	King's Florist
17	Jam Baugh Road, Hyderabad – 01
	040-24605797, 9849013057
	Flower Power (Ravi Advani)
18	7-A/25, WEA Karol Bagh, New Delhi
	011-25825439
	Appa Gaikwad
19	Market Flower Bazaar, Gultekdi, Pune – 37
	+91-9890365718
Source	e: NIPHT