

Agriculture Export Policy (AEP) of Maharashtra State

Prepared by

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(MSAMB)**

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Agriculture Export Policy (AEP) For Maharashtra State

INDEX

S. No.	Title	Page No.
1	Introduction	3
2	Maharashtra: Advantage for Agriculture Export Hub	5
3	Aims & Objectives	9
4	Current Agriculture Trade Scenario of Maharashtra	10
5	Elements of Maharashtra State Agriculture Export Policy Framework	15
6	Strategic Recommendations	16
6.1	Policy Measures	16
6.2	Stable Trade Policy Regime	16
6.3	Reforms in APMC Act in Maharashtra	17
6.4	Infrastructure and Logistics	18
6.5	Holistic Approach To Boost Exports	19
6.6	Greater Involvement Of State Governments In Agriculture Exports	20
6.6.1	Identification of a Nodal State Department / Agency for Promotion of Agriculture Export	20
6.6.2	Inclusion of Agricultural Exports in the State Export Policy	21
6.6.3	Institutional Mechanism at State Level and Cluster Level to Support Exports	21
6.6.4	Cluster Facilitation Cell	23
7	Operational Recommendations	24
7.1	Focus on Clusters	24
7.2	Promoting Value Added Product Export	27
7.3	Skill Development	30
7.4	Market Development	31
7.5	Attract Private Investments in Export Oriented Activities and Infrastructure	32
7.6	Ease of Doing Business (EoDB) & Digitization	33
7.7	Developing Sea Protocol	34
7.8	SPS and TBT Response Mechanism	35
7.9	Traceability System	36
7.10	Importing Export Oriented Germplasm & Planting Material	36
7.11	Research and Development	37
7.12	Use of Agri-Start-Up Fund	38
	Annexure - I	39

1. INTRODUCTION:

Agriculture is the mainstay of the state of Maharashtra. Maharashtra's economy is predominantly agrarian. It is the main occupation of the people. Both food crops and cash crops are grown in the state. Principal crops include rice, jowar, bajra, wheat, pulses, turmeric, onions, cotton, sugarcane and several oil seeds including groundnut, sunflower and soybean. The state has huge areas, under fruit cultivation of which mangoes, bananas, grapes, and oranges are the main ones. The agriculture in state is predominantly rain-fed. The state has 24 per cent of drought—prone area of the country. However state has potential for growth in agricultural sector in spite of challenges.

Agriculture & allied activities sector plays an important role in the economic development of the State. The share of agriculture & allied activities sector in the total Gross State Value Added (GSVA) is about 12.2 per cent during 2016-17 as against 15.3 per cent during 2001-02 which shows declining trend over the period, whereas major portion of the population is still dependent on this sector. Reduction in average size of agricultural holdings, increasing number of marginal & small farmers, dependency on monsoon & weather, low productivity are the major concerns of the agriculture sector in the State.

Though, the share of the allied activities in the Agriculture & allied activities sector is comparatively less, its contribution with reference to livelihood is of immense importance. The increasing consumption of fruits & vegetables, milk & milk products, poultry, meat, fish and flowers due to changing lifestyle indicates substantial growth potential. This potential needs to be tapped to the greater extent for enhancing farmers' income.

The vast production base offers India tremendous opportunities for export. During 2018-19, India exported fruits and vegetables worth Rs. 10236.93 crores/ 1,469.33 USD Millions which comprised of fruits worth Rs. 4817.35 crores/ 692.01 USD Millions and vegetables worth Rs. 5419.48 crores/ 777.25 USD Millions. India is not only the largest producer of cereal as well as largest exporter of cereal products in the world. India's export of cereals stood at Rs. 56,841.08 crore / 8,180.87 USD Millions during the year 2018-19. Rice (including Basmati and Non-Basmati) occupy the major share in India's total cereals export with 95.7% during the same period. Whereas, other cereals including wheat represent only 4.3 % share in total cereals exported from India during this period. India's exports of Processed Food was Rs. 31111.90 Crores in 2018-19, which including the share of products like Mango Pulp, Processed Vegetables, Cucumber and Gherkins (Prepd. & Presvd), Processed Fruits, Juices & Nuts, Pulses, Groundnuts, Guargum, Jaggery & Confectionary, Cocoa Products, Cereal Preparations, Alcoholic Beverages, Miscellaneous Preparations, and Milled Products.

The nation's export trade depends largely on agricultural sector. For example, agricultural commodities such as jute, tobacco, spices, oilseeds, raw cotton, tea as well as coffee, fruits & vegetables etc. accounts for approximately 18 % of the entire value of exports of a country. This demonstrates that agriculture products also continue to be important source of earning a

country foreign exchange. This helps to reduce countries unfavorable balance of payments as well as saving foreign exchange. This amount may be well used to import other essential inputs, machinery, raw-material, and other infrastructure that is helpful for the support of country's economic development.

Total agricultural exports from India grew at a CAGR of 16.45 per cent over FY10-18 to reach US\$ 38.21 billion in FY18. Between Apr 2018-Feb 2019 agriculture exports were US\$ 34.31 billion. India is also the largest producer, consumer and exporter of spices and spice products. Spice exports from India reached US\$ 3.1 billion in 2017-18. Though India's share in the global market is still nearly 2.2% only, there is increasing acceptance of horticulture produce from the country. This has occurred due to concurrent developments in the areas of state-of-the-art cold chain infrastructure and quality assurance measures.

The agriculture export from India, as per the category of importing countries is as under. This shows that there is wide scope for export to developed countries, where returns of the export are much more than the developing or least developing countries. To increase the export to developed countries, integrated efforts are required.

Category	Qty (MTs)	Qty (%)	Value (Rs. Crores)	Value (%)
Developing Countries	14465897	63	89930	69
Developed Counties	2363892	10	22014	17
Least Developing Countries	6180225	27	17870	14

Maharashtra is leading state in the country for export of agriculture produce. In the horticulture crops, Maharashtra ranks 1st in many fruits like grapes, pomegranate, banana etc. and in many vegetables too. State has in the top positions in production of Cereals, pulses, oilseeds, dairy products, fisheries and animal products. Maharashtra has got location advantage for agriculture export along with infrastructure. If more integrated efforts are put into, Maharashtra will become the export hub of agro produce from the country. To integrate these efforts of various stakeholders, Maharashtra State has developed this Agriculture Export Policy for the state, in accordance with the Agriculture Export Policy developed by Department of Commerce, Government of India.

2. MAHARASHTRA: ADVANTAGE FOR AGRICULTURE EXPORT HUB:

1. Maharashtra is the third largest state in area and second largest state in population of India. It has an area of 307,713 sq. km. with 36 districts, 355 blocks and 43565 villages and a population of 11.24 Crores. The 54% population of the state is rural. All the districts of Maharashtra are grouped into six divisions: Aurangabad Division, Amravati Division, Konkan Division, Nagpur Division, Nashik Division and Pune Division.
2. Maharashtra is situated in the western region of the country a long coastline stretching nearly 720 km along the Arabian Sea. It is surrounded by Gujarat to the North West, Madhya Pradesh to the north, Chhattisgarh to the east, Telangana to the south east, Karnataka to the south and Goa to the south west.
3. Maharashtra's State's contribution to all India nominal GDP is highest at 14.4 per cent in 2017-18. As per the first revised estimates, Nominal Gross State Domestic Product (GSDP) for 2017-18 is ` 24,11,600 crore as against 21,88,532 crore for 2016-17. Real GSDP is 19,42,769 crore for 2017-18 as against 18,06,581 crore for 2016-17. The *Per capita* State Income for 2017-18 is 1,76,102 as against 1,62,005 for 2016-17. It is home to some of the largest corporate in the country.
4. The State ranks 11th in average size of operational holding (1.34 ha) amongst all states, as per Agriculture Census 2015-16. The total area of small & marginal (upto 2.0 ha) operational holdings was 92.20 lakh ha constituting 45.0 per cent of the total area whereas number of small and marginal operational holdings was 121.55 lakh which is 79.5 per cent of the total number of operational holdings.
5. Maharashtra has the largest economy in India. Although Maharashtra is a highly industrialized state of India, agriculture continues to be the main occupation in the state. Maharashtra's economy is primarily agricultural and rural. Agriculture is major occupation of the people in Maharashtra. Both food and cash crops are grown in the State.
6. The state has nine agro climatic zones favorable for cultivating multiple crops, fruits and vegetables round the year.
7. The state produce variety of cereals, fruits, vegetables fisheries and livestock Principal crops of Maharashtra include rice, jowar (sorghum), bajra (pearl millet), pulses, and sugarcane and oil seeds such as groundnut, sunflower and soybean. The state has huge areas under fruit and vegetable cultivation with large production of fruits such as mangoes, bananas, grapes, oranges, sapota, custard apple, papaya and largest producer of vegetables such as onion and tomatoes.

8. Agricultural Marketing in Maharashtra:
 - a. Maharashtra is the leading state in implementation of Agriculture Marketing Systems as compared to other states in the country. The regulatory aspects of Agriculture Marketing are taken care by Directorate and Marketing and the developmental aspect is taken care by Maharashtra State Agricultural Marketing Board (MSAMB). Maharashtra has adopted the provisions of Model Act for developing alternatives for farmers to sell their produce.
 - b. The Maharashtra State Agricultural Marketing Board is mainly entrusted with activities such as keeping necessary co-ordination in working of market committees (307 Main Market Yards, 597 Sub Market Yards), development & promotional activities of Agriculture Produce Marketing Committees (APMC), establishment of agro-export zones, horticultural training centers and grading & packing facilities, etc. The quantity and value of arrivals in all the market committees in the state in 2017-18 is 184.41 Lakh MTs worth Rs. 51,093 Crores.
 - c. NITI Aayog launched in 2016 an index (Agricultural Marketing and Farmer Friendly Reforms Index (AMFFRI)) to rank States and UTs based on implementation of seven provisions proposed under model APMC Act like joining e-NAM initiative, special treatment to fruits and vegetables for marketing and level of taxes in mandis. These indicators reveal ease of doing agribusiness as well as opportunities for farmers to benefit from modern trade and commerce and have wider option for sale of her/his produce. These indicators also represent competitiveness, efficiency and transparency in agri. markets.
 - d. The State of Maharashtra achieved first rank in implementation of various reforms. The State has implemented most of the marketing reforms and it offers best environment for doing agri-business among all the States/UTs.***
9. Fruits and vegetables are de-notified by way of Maharashtra Ordinance dtd. 5 July 2016 and incorporated in the APMC Act vide Government Gazette dtd. 12 January 2017. If the trade takes place outside mandi yard there is no need to pay mandi fees. Under the Maharashtra Agricultural Produce Marketing (Development & Regulation) Act, the number of direct marketing licenses issued upto 19th November, 2018 was 981. Apart from these, 52 private market licenses have been issued.
10. As per the Agricultural Marketing and Farmer Friendly Reforms Index compiled by NITI Aayog in 2016, the State achieved first rank in the implementation of the

marketing reforms and it offers best environment for doing agri-business among all the States/UT's.

11. e-NAM is a pan-India electronic trading portal which networks the existing APMC mandis to create a unified national market for agricultural commodities. This provides a single window service for all APMC related information & services and includes commodity arrivals & prices, buy & sell trade offers, provision to respond to trade offers. While material flow of agriculture produce continues through mandis, an online market reduces transaction costs and information asymmetry. Under the e-NAM, in all 60 market committees have been included in Maharashtra in two phases. Gate entry, e-auction and e-payment have been started in 30 market committees in first phase. In second phase, gate entry in 30 market committees has been started out of which e-payment has been started in 21 market committees. At the end of November, 2018, around 30 lakh quintal of grains have been e-auctioned amounting to 865 crore. Around Rs. 22.34 crore of e-payment has been done in 29 market committees. In 59 market committees, e-single labs have been established to monitor quality of agriculture goods.
12. Over this period from year 1970 to 2016, the average size of land holding decreased from 4.24 ha to 1.34 ha in Maharashtra. Therefore, for attaining significant volumes of high quality produce of the same variety and to acquire considerable negotiation capacities, the farmers' groups / Farmer Producer Organizations need to be established. They shall be promoted for the Farmer Producer Companies, under Section IX-A of the Companies Act. Around 1749 FPCs are registered in Maharashtra. If they are nurtured and trained, can be utilized as a best resource for developing backward and forward linkages and will become financially viable.
13. The state has a well-developed social, physical and industrial infrastructure. Apart from 16 airports, the state has two major and 48 minor ports. Biggest International Airport like Mumbai connecting all the major cities across the world and the Jawaharlal Nehru Port Trust (JNPT), handling major export consignments of the country is in Maharashtra.
14. Potential for setting up of Food Processing Industry in Maharashtra. Largest contributor to India's GSDP, a large industrial base with 14.4% share of India Industrial sector. Mumbai, the capital of Maharashtra houses the headquarters of most of the major corporate & financial institutions. Well-developed infrastructure, abundant natural resources, connectivity to all major areas and skilled human resource make it an ideal investment destination. Major strength of Maharashtra's food processing industry lies Cereals- Rice, wheat, Maize; Nutri-cereals- Pearl millet (Bajra) and Sorghum other small millets, Fruits and Vegetables - Mangoes, Bananas, Grapes, Oranges, Onion and Tomatoes; Oilseeds- Groundnut, Sunflower and

Soybean, Pulses- Pigeon pea, Chickpea, Green gram (Moong), Black gram (Moth), Commercial crop- Sugar, cotton; Livestock & fisheries: Milk, fisheries, meat and eggs etc.

15. The State's agricultural export policy has drafted by increased emphasis given to technology transfer to farmers for globally competitive production in terms of quality and post-harvest. The post harvest handling, value addition, processing, scientific storage, modern marketing system and export promotion are the main features of the policy. The components considered are extra sensitive towards the need of techno-infrastructure and market intelligence, product development and product promotion.
16. As a short-term policy, it is proposed to undertake studies to scientifically define the constraint and identify the alternative solutions for encouraging exports by making gap analysis in infrastructure, technology and trained manpower and to identify areas requiring policy and institutional reforms. Organizing awareness campaign for the farmers of the State for the new regime of International markets, tackling the issues of export quality production, PHM, packaging, processing and marketing, diversification of agriculture towards horticulture, medicinal and aromatic plants, spices etc., application of IT in agriculture marketing for addressing mass of farming community for transfer of technology, capacity building for extension workers and giving due importance to frontier technology as R & D policy should be the ingredients of this agri-exports revolution in the state.
17. Long term policy for agri-exports is based upon setting quality parameters for various agricultural produce on scientific lines, standardization of production technology for export quality production at globally competitive prices to serve dual purpose of protecting domestic market from imported farm produce and getting increased access to export market, mapping of PHM infrastructure such as cold chain, sorting and grading / pack houses, packaging, transport and storage and marking gap analysis, identifying the need for varietal changes in crops from point of view of requirement of end user, identification of technology gap in production, plant protection, PHM, processing etc., market sector reforms for domestic marketing system, setting a system for market survey, market intelligence, market information, product development, product promotion in place - especially with respect to transit markets and export destinations, application of IT in agriculture extension and information dissemination, assessment of HRD needs in changed scenario and increased participation of private sector and women.

3. AIMS & OBJECTIVES:

The Maharashtra State Agriculture Export Policy is framed with a focus on agriculture export oriented production, export promotion, better farmer realization and synchronization within policies and programs of Government of India and Government of Maharashtra. It is focused to have a “Farmers’ Centric Approach” for improved income through active involvement of farmers in export.

The broad objectives and vision of the Maharashtra State Agriculture Export Policy is highlighted below.

1. To make **Maharashtra as an Agri. Export Hub** of a country.
2. **Entrepreneurship development** in Agri. Export in the state of Maharashtra.
3. To **diversify export basket, destinations** and boost high value and value added agricultural exports including focus on perishables.
4. To **promote novel, indigenous, organic, ethnic, traditional and non-traditional** Agri products exports.
5. Creation of efficient **export oriented infrastructure** and utilization of existing infrastructure.
6. To provide an **institutional mechanism** for pursuing market access, tackling barriers and deal with sanitary and phyto-sanitary issues.
7. Provide support to stakeholders for making **product competitive** in export markets.
8. **Skill development** of the concerned stakeholders in the agri. export.

4. CURRENT AGRICULTURE TRADE SCENARIO OF MAHARASHTRA:

Agriculture is the mainstay of the state of Maharashtra. Maharashtra's economy is predominantly agrarian. It is the main occupation of the people. Both food crops and cash crops are grown in the state. Principal crops include rice, jowar, bajra, wheat, pulses, turmeric, onions, cotton, sugarcane and several oil seeds including groundnut, sunflower and soybean. The state has huge areas, under fruit cultivation of which mangoes, bananas, grapes, and oranges are the main ones. The total irrigated area which has been used for crop cultivation is 33,500 square kilometers. The agriculture in state is predominantly rain-fed. The state has 24 per cent of drought-prone area of the country. However state has potential for growth in agricultural sector in spite of challenges.

Agriculture & allied activities sector plays an important role in the economic development of the State. The share of agriculture & allied activities sector in the total Gross State Value Added (GSVA) is about 12.2 per cent during 2016-17 as against 15.3 per cent during 2001-02 which shows declining trend over the period, whereas major portion of the population is still dependent on this sector. Reduction in average size of agricultural holdings, increasing number of marginal & small farmers, dependency on monsoon & weather, low productivity are the major concerns of the agriculture sector in the State.

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The land utilization statistics for 2016-17 depicts that of the total 307.58 lakh ha geographical area of the State, the gross cropped area was 232.24 lakh ha while the net area sown was 169.10 lakh ha (55.0 per cent).

Sustainable Development Goals envisages promotion of sustainable agriculture and ensuring availability & sustainable management of water. Accordingly, the major initiatives like, enhancement of crop productivity, improving yield and quality of horticulture & floriculture, reducing cost of cultivation, integrated farming system approach, promotion of group farming, soil & water conservation for moisture security, creation of quality infrastructure for storage and processing to control wastage, post-harvest technology for value addition, promotion of value addition chain, promoting export of agriculture produce, agriculture credit and risk mitigation are incorporated in the Vision 2030 document of the State.

Horticulture holds on an average 30 per cent share in Gross State Value Added (GSVA) of crop sector.

Area and production of principal kharif crops in Maharashtra (2017-18):

Crop	Area ('000 Ha)	Production ('000 MTs)
Rice	1,425	2668
Jowar	565	547
Bajra	788	669
Ragi	93	106
Maize	695	2166
Other Cereals	42	21
Total Cereals	3608	6177
Tur	1375	1250
Moong	432	159
Udid	351	121
Other Pulses	81	54
Total Pulses	2239	1584
Total Foodgrains	5847	7761
Soybean	3694	3805
Groundnut	240	275
Sesamum	27	5
Nigerseed	13	2
Sunflower	16	8
Other Oilseed	6	1
Total Oilseeds	3996	4096
Cotton (Lints)*	4351	6094
Sugarcane**	902	83138
Total Sown Area	15096	

** Harvested Area

* Production of Cotton in '000 bales of 170 kg each.

Source: Commissionerate of Agriculture, GoM

Area and production of principal rabi crops in Maharashtra (2017-18):

Crop	Area ('000 Ha)	Production ('000 MTs)
Jowar	2899	1842
Wheat	1138	1885
Maize	334	905
Other Cereals	7	4
Total Cereals	4378	4636
Gram	2234	2049
Other pulses	102	51
Total Pulses	2336	2100
Total Foodgrains	6714	6736

Sesamum	4	1
Safflower	39	21
Sunflower	24	12
Linseed	11	3
Rapeseed & Mustard	7	2
Total Oilseeds	85	39
Total	6799	

Source: Commissionerate of Agriculture, GoM

Area and production of Horticulture crops in Maharashtra (2017-18):

Crop	Area ('000 Ha)	Production ('000 MTs)
Fruits	735.18	11728.66
Vegetables	726.20	12306.72
Condiments & Spices	34.37	370.70
Plantation Crops	220.72	361.07
Flowers*	5.49	86.07

* Include cut and loose flowers

Source: NHB, GoI

Maharashtra – An advantage for Export:

The share of Maharashtra state in the country's agriculture export is considerable because of many factors, which can be enlisted as under:

- Maharashtra has typical monsoon climate, with hot, rainy and cold weather seasons. Tropical conditions prevail all over the state. Hence wide range of commodities available. Both food crops and cash crops are grown in the state.
- Availability of Good Quality Produce.
- Availability of Infrastructure – pilot projects for post harvest handling, as per the protocols of importing countries are available.
- India's biggest Sea Port (JNPT) and International Airport (Chhatrapati Shivaji International Airport) are in and around Mumbai.
- Farmers have easy adoptability of new technology and Package of Practices.
- Majority of the agri. exporters are having their set up in Mumbai, Pune and Nashik.
- Major catchment areas like Gujarat, Karnataka, Andhra Pradesh etc. are directly linked with Mumbai by Road, Rail and Airways.
- Export from Maharashtra (considering exit ports in Maharashtra) is almost more than 50% and even more than 75% in case of Grapes, Mangoes, Pomegranate, Flowers, Raisins etc.

Export of agro commodities from Maharashtra as compared to India

No.	Year Commodity	State / Country	2015-16				2016-17				2017-18			
			Quantity	Qty %	Value	Value %	Quantity	Qty %	Value	Value %	Quantity	Qty %	Value	Value %
1	Mango	Maharashtra	24243	66.73	259	81.70	37180	69.92	368	82.51	35342	71.86	309	80.82
		India	36329		317		53177		446		49180.48		382.34	
2	Grapes	Maharashtra	145830	93.36	1518	97.87	187296	80.41	1960	93.87	200203	93.36	2105.55	98.11
		India	156203		1551		232940		2088		214440.6		2146.21	
3	Banana	Maharashtra	34915	37.28	115	32.30	38487	34.71	130	33.51	44559.26	43.98	149.35	42.82
		India	93665		356		110872		388		101314.4		348.77	
4	Orange	Maharashtra	149	0.43	0.77	1.08	788	1.64	3.84	3.28	786.24	4.97	4.53	13.00
		India	34522		71.29		48110		117		15835.15		34.84	
5	Pomegranate	Maharashtra	24355	78.39	354	85.10	29568	59.43	371	75.71	32652.49	68.98	412	76.62
		India	31070		416		49755		490		47335.7		537.72	
6	Raisins (Manuka)	Maharashtra	26009	96.97	197.44	96.78	30042	97.36	261	97.03	24434.25	95.60	230.98	96.63
		India	26823		204		30858		269		25558.49		239.03	
7	Rose (Flowers)	Maharashtra	934	47.22	26.86	47.84	907.32	44.70	26.56	46.22	877.01	34.85	24.84	42.86
		India	1978		56.14		2030		57.46		2516.79		57.95	
8	Rose (Saplings)	Maharashtra	13.93	61.80	0.7	60.34	22.84	78.35	1.09	77.30	37.78	83.16	1.81	82.65
		India	22.54		1.16		29.15		1.41		45.43		2.19	

No.	Year	State / Country	2015-16				2016-17				2017-18			
			Quantity	Qty %	Value	Value %	Quantity	Qty %	Value	Value %	Quantity	Qty %	Value	Value %
9	Mango Pulp	Maharashtra	15288	11.86	123	15.45	20470	15.64	168	19.86	20659.41	18.62	155.79	23.12
		India	128866		796		130885		846		110923.7		673.92	
10	Onion	Maharashtra	781393	65.05	1590	57.88	1310274	54.24	1704	54.86	1054618	66.37	1971.66	63.83
		India	1201245		2747		2415755		3106		1588986		3088.82	
11	Other vegetables (exl. Onion)	Maharashtra	167376	23.92	727	34.31	196477	19.33	822	29.03	194232.6	25.15	838.17	40.05
		India	699600		2119		1016435		2832		772448.1		2092.95	
12	Other processed fruits & Veg (exl. Mango Pulp)	Maharashtra	116931	36.46	1042	35.93	120326	33.86	1058	33.60	119043.2	30.42	1069.64	31.42
		India	320732		2900		355314		3149		391283.8		3404.72	
13	Dried vegetables in air tight packages	Maharashtra	14118	21.33	206	22.54	16404	18.90	250	23.11	10215	19.32	128	22.38
		India	66180		914		86790		1082		52880		572	
	Consolidated Statistics	State / Country	Quantity	Qty %	Value	Value %	Quantity	Qty %	Value	Value %	Quantity	Qty %	Value	Value %
		Maharashtra	1351554	48.32	6159	49.48	1988242	43.86	7123	47.90	1737660	51.52	7401	54.50
		India	2797235		12448		4532950		14871		3372749		13581	

Source: Commissionerate of Agriculture, GoM

5. ELEMENTS OF MAHARASHTRA STATE AGRICULTURE EXPORT POLICY FRAMEWORK:

The State Agriculture Export policy recommendations are organized in two broad categories: strategic and operational. The salient features of the agricultural export policy are highlighted below and discussed in greater detail in subsequent sub-sections.

A. Strategic:

1. Policy Measures
2. Stable Trade Policy Regime
3. Reforms in APMC Act in Maharashtra
4. Infrastructure and Logistics Support
5. Holistic Approach to boost exports
6. Active involvement of Government of Maharashtra in Agri Exports

B. Operational:

1. Focus on Clusters
2. Promoting Value Added Product Export
3. Skill Development
4. Market Development
5. Attract Private Investments in Export Oriented Activities and Infrastructure
6. Ease of Doing Business (EoDB) & Digitization
7. Developing Sea Protocol
8. SPS and TBT Response Mechanism
9. Traceability System
10. Importing Export Oriented Germplasm & Planting Material
11. Research and Development
12. Use of Agri-Start-Up Fund

6. STRATEGIC RECOMMENDATIONS:

As mentioned in the Agriculture Export Policy led down by Department of Commerce, Government of India, top exportable agricultural commodities and products has been identified on the basis of current global and Indian trade. Each commodity has been studied in detail based on five key criteria: India's current potential, India's Production, Maharashtra's share, Export from India, Current Destinations, Major importing countries, their Supplier countries, our Target Countries, future market potential, interventions required (Infrastructure/ Capacity Building / Market Access etc) global trade, and. Some major potential commodities have been shortlisted as focus commodities for specific farm, infrastructure and market intervention. Accordingly the Product-Market Mix is prepared which is attached in Annexure – I.

6.1 Policy Measures:

To boost agricultural exports, general and commodity specific measures will be identified and implemented at little to no financial cost, on urgent basis. e.g. use of scientific Packhouses for packing of material for export consignments, to ensure quality, residue level, emphasis on registration of more and more farms under Hortinet system etc.

6.2 Stable Trade Policy Regime:

The changes in export regime on ground of domestic price fluctuations, religious and cultural belief can have long term repercussions. Such measures require constant fine tuning and keep the market anxious which often leads to price shocks. While these decisions may serve the immediate purpose of maintaining domestic price stability, they end up distorting India's image in international trade as a long term and reliable supplier. It is necessary to refrain from making a distinction between the products meant for export and those for domestic consumption. This will provide the farmer some confidence to plan for the overseas market.

Providing assurance that the processed agricultural products and all kinds of organic products will not be brought under the ambit of any kind of export restriction (viz. Minimum Export Price, Export duty, Export bans, Export quota, Export capping, Export permit etc.) even though the primary agricultural product or non-organic agricultural product is brought under some kind of export restrictions. Therefore State Government will give confidence to the exporters, processors of agricultural products and all kinds of organic products, about the stable Trade Policy Resume for export of their produce.

In the Agri Export Policy of DoC, GoI, it is mentioned that few commodities which are essential for food security will be identified in consultation with the relevant stakeholders and Ministries. Any export restriction on such identified commodities under extreme price situation will be based on decision of a high level committee. Therefore Government of Maharashtra will precisely analyze and forecast the situation of production of such crops (i.e. onion) which will help in taking decisions at central level. Policy related issues will be discussed at State Level Steering cum Monitoring Committee.

6.3 Reforms in APMC Act in Maharashtra:

Maharashtra Agricultural Produce Marketing (Development and Regulation) Act 1963 has been amended in Maharashtra, as per the Model Act given by Government of Maharashtra, to develop parallel options for farmers to sell their produce. As per NITI Aayog, the State of Maharashtra achieved first rank in implementation of various marketing reforms. The State has implemented most of the marketing reforms and it offers best environment for doing agri-business among all the States/UTs. This amendment in act enabled following measures:

- Direct marketing.
- Private markets.
- Farmer-Consumer Markets.
- Single License System
- Special Commodity Markets
- Contract farming.
- APMC Secretary Panel

Moreover, State Government incorporated other Amendments:

- Provision of e-Trading (Implementing Electronic National Agriculture Market - e-NAM system in 60 APMCs on pilot basis)
- Market yard to be area of operation
- Single point levy of market fee across the State
- Deregulation of Fruits and Vegetables outside market yard.
- Commission charges to be paid by purchaser.
- Election Reforms – Agriculturist members to be elected directly by an agriculturist who is not less than 18 years of age, holding minimum 10 R land and who has sold his / her notified agriculture produce at least 3 times in preceding 5 years.

These amendments enabled farmers more flexibility / options to sell their produce without being subjected to regulations constraining decision to buy and sell. Exporters are now making Contract farming with growers directly. Exporter getting quality and consistent supply, growers are getting assured market with pre-determined rates. Exporters buying the produce from growers directly, this leads to understanding of requirements of international markets by growers, thus market led production is improving. As the exporters are buying the produce at farm gate, the risk of post harvest losses during transit and market fluctuations are reduced at the part of farmers.

The awareness about these developments will be done through capacity building program of stakeholders. The handholding support will be provided to the farmers/their cooperatives/ farmer producer companies/groups, as an ease of doing business. Any issues in this regard will be discussed and resolved in the Cluster Facilitation Cell proposed in this State Agriculture Policy. Policy related issues will be discussed at State Level Steering cum Monitoring Committee.

6.4 Infrastructure and logistics:

With the globalization of production, and supply and retail chains, ensuring the safety and quality of products is vital. Developing countries like India must be able to prove to establish conformity to international standards and/or those applied in importing countries and reliability to maintain high-quality certification and inspection procedures. For the same post harvest management is the important factor to maintain. Need of the infrastructures in agriculture exports are the pre-requisites for post harvest management, inspection and certifications. Post-Harvest Infrastructure supports smooth logistical movement of agri produce. This will have a direct co-relationship in increasing export volumes, assuring quality & ensuring better price realization per unit. Better quality compliance, Facilitates smooth logistic handling which offers opportunities for expanding the Sourcing/Catchment area, warehouse facilities in the importing countries where India is a major exporter of agricultural products, would help increase the current exports to that country.

The originations at APEDA, at Central level and Maharashtra State Agricultural Marketing Board (MSAMB), at state level has been actively involved in creation of pilot infrastructure for horticulture produce to improve quality and value addition of produce and to achieve optimum shelf life resulting into increased quality exports of Indian agriculture produce. Recently, major focus has been laid to encompass setting up of processing units for horticulture and agriculture produce and also strengthen the infrastructure at exit point ports.

The gaps in the infrastructure, i.e. farm gate infrastructure / common infrastructure, will be identified by the State Level Steering cum Monitoring Committee with the support of cluster facilitation cell in respective areas of the state and accordingly the feasibility of the infrastructure shall be studied. This shall ensure the reduction in post harvest losses, pest and disease free supply, residue monitoring of export consignments etc., in compliance with international markets, to boost the export as per international market requirements. Some of the illustrations in infrastructure development are as under.

- a. **Packhouses and Cold Chain:** Need of setting up of intermediate storage; setting up of mechanized handling facilities such as sorting, grading, washing, waxing, ripening, packing, palletization, pre cooling, cold storage, pre-shipment treatment such as fumigation, x-ray screening, specialized storage facilities such as CA, MA, etc. are needed to be created as per the need of the cluster.
- b. **Special infrastructure:** Special infrastructures like Vapor Heat Treatment, Irradiation Facilities, Hot Water Treatments and Cold Water Treatment Facilities, Dehydration, IQF, Ripening etc. to enable exports of specific commodities may be created, as per demand of the trade.
- c. **Exit Point Infrastructure:** Based on stakeholders' feedback, there is need for a multi-commodity pack house for storing perishable and semi-perishable commodities at ports to decrease the transit time taken from entering the port to shipment. Need for a parallel line for entry of perishable commodities into the port

along with other commodities is also felt as entry to the port is identified as a major reason for loss of perishable crops.

Identify major ports where current/projected bulk and container agri traffic demands infrastructure and modernization initiatives. Development of Infrastructure at Exit point ports like at JNPT and at International Airports like Mumbai, Pune, Nashik, Nagpur & Aurangabad as per the requirements of the trade. Identify the challenges of operationalizing existing defunct infrastructure / its modification – automation at ports such as the Centre for Perishable Cargo (CPC) and requirement of new CPCs, designated and sufficient quarantine areas, Pallet container handling system, Automatic storage retrieval system at International & Domestic Airports would increase efficiency / cost effectiveness of export through air cargo.

- d. **Infrastructures at Railway stations:** to handle agri. produce i.e. for onion, banana, and oranges etc.
- e. **Processing infrastructure:** Infrastructure for processing of agro commodities are also to be developed, as per the need of the trade.
- f. **Testing Labs:** Testing Labs are also need to be established and strengthened as per the international market requirements. Leaf and Tissue Analysis labs, Residue testing labs, Food Testing labs- to check quality standards of food material targeted for exports, upgraded and advanced Soil & Water Testing labs. This shall undertake establishment of such facilities in public / private partnership in a phased manner.
- g. **Refrigerated Transport Vehicles:** To reduce the post-harvest losses during transit, the cold / refrigerated vehicles are required for perishable produce.
- h. **Infrastructure abroad:** Essential infrastructure facilities for various agriculture products in the importing countries where India is a major exporter of agricultural products would provide edge over competitors. It would help exporters to provide consistent supplies, maintain inventory and reduce distribution costs.

Efforts will be to attract private investments in export oriented infrastructure at larger scale. Involvement of private sector since the initial planning of the infrastructure, results in efficient infrastructure which lead to boost the agri. Export from Maharashtra. This shall undertake establishment of such facilities in public & private partnership in a phased manner.

6.5 Holistic approach to boost exports

Targeting global market needs holistic approach which will ensure that the supply chain remains lean, responsive, transparent throughout the value chain, compliant with regulatory bodies and invoke quality, ensuring brand image is maintained. For the same the convergence has prime most importance, in terms of their resources & efforts. The activities of various ministries / departments / Institutions of Government of India are needed to be converged. i.e. DAC&FW, DAHDF, DGFT, Food Safety and Standards Authority of India (FSSAI), Department of Agricultural Research and Education (DARE) / Indian Council of Agricultural

Research (ICAR), MoFPI, Ministry of Shipping & Transport, Ministry of Railways, Ministry of Civil Aviation Department of Consumer Affairs (DoCA), Department of Food and Public Distribution (DFPD), Agriculture Universities, Electricity Department, Public Works Department, Krishi Vigyan Kendras (KVKs), , .

Many activities are to be implemented with number of organizations, like market access for any of the international market for specific products; the regulatory aspects shall be taken care by Plant Protection Department while the trade coordination shall be taken care by APEDA. Similarly such role can be played by State Agriculture Department towards strengthening backward linkages and Maharashtra State Agriculture Marketing Board for forward linkages. This will ensure strategic and operational synergy across the state.

Convergence of externally assisted POCRA, SMART, MAGNET etc. projects, various schemes of Government of India and Government of Maharashtra shall be ensured.

6.6 Greater involvement of State Governments in Agriculture Exports:

Since India's independence, agriculture is a "State" subject and trade & commerce is under Central Government. However, if there is a subject of International market, then there is need of precise and efficient coordination between Central and State efforts. Every State has a different (and often multiple) agro-climatic zone leading to different cropping patterns. Therefore state's role in deciding in agri. export policy is crucial. The package of practices, post harvest management, farmers' awareness, infrastructure, logistics etc. varies as per state. Hence role of Government of Maharashtra is important. Hence active involvement of State Government is committed as per the set of activities led down in this State Agri Export Policy.

6.6.1 Identification of nodal State Department / Agency for promotion of agriculture export:

Depending on the export potential of the State and the quality of resources available with autonomous bodies, either a Department or an Agency of the State Govt. could be declared as a nodal body for agricultural exports, As mentioned in India's Agri. Export Policy. However we propose special State Export & Processing Promotion Board / Corporation may be established and can be declared as a nodal agency for implementation of Agri Export Policy in Maharashtra. The function of such nodal agency would be to remain engaged with the stakeholders, identify infrastructure and logistic bottlenecks, liaise with different Departments within the State Government and with Central Ministries / departments/ organizations to address issues faced by the exporters, identification of the schemes run by various Central Ministries and Agencies and maximize the allocation for the State Governments; coordinate, implement, monitoring of activities mentioned in this state agriculture export policy and responsibilities given by State Level Steering Committee. Nodal agency would also work towards creation of dynamic and functional information-sharing mechanism between the State and Centre on various issue including SPS and TBT issues.

APEDA is the central level agency coordinating & monitoring the activities of agri export promotion at country level and MoFPI for agro processing. Such dedicated agency shall be developed at state level for export and processing. Currently in many states the activity of agri. export /processing is being looked after by many agencies and departments like Department of Agriculture /State Agricultural Marketing Boards/ Agro Industrial Development Corporation etc. These organizations have their own regular objectives and functions. Export and processing are their additional or secondary functions. Therefore they do not have special skillset /expertise in the specialized areas like export and processing. Due to lack of provision of funds and regulatory framework, they lack in timely business decisions. Therefore dedicated state level Export Promotion Board / Corporation shall be established, with the financial support of central and state government. This organization will coordinate, undertake, and monitor the activities only related to export promotion & processing and it will work as a state nodal agency for export and processing. The Department of Commerce, GoI will play a proactive role in capacity building, supporting and handholding such nodal agency at the State level, as mentioned in the country's agri. export policy.

6.6.2 Inclusion of agricultural exports in the State Export Policy:

As mentioned in the Country's Agri Export Policy, Maharashtra does not have special state export policy. The Industry Department, Government of Maharashtra has Maharashtra Industrial Policy having focus on IT sector and Micro, Small & Medium Enterprises (MSME). As agriculture has perishable and semi-perishable food items, a separate State Agriculture Export Policy is proposed in Maharashtra State.

For bringing the awareness and benefits of policy changes in the APMC Act, bringing out policy for marine fisheries, promoting Good Agricultural Practices (GAP)/IndGAP, working on quality assurance system, planning for pre and post-harvest, infrastructure creation for further value addition, incentivizing value addition and food processing industries, etc. the State's Agriculture Export Policy is prepared.

6.6.3 Institutional Mechanism at State level and cluster level to support exports:

Departments like Agriculture, Horticulture, Animal Husbandry, Dairy Development, Fisheries, Cooperation & Marketing, Food Processing, Industry etc. look after the production and post-handling issues relating to agriculture, horticulture, aquaculture, spices, floriculture and value addition of these products at the State level.

To administer and monitor the activities proposed under State Agri Export Policy and to converge the schemes and efforts of these departments, a state level Steering committee under the chairmanship of Hon. Chief Secretary, Maharashtra State is proposed as under. The state level Regional Authorities of regulatory and developmental organizations will be the member of the committee.

State Level Steering Committee:

No.	Member of the Committee	Designation in the committee
State Level Steering Committee		
1.	Chief Secretary, Government of Maharashtra	Chairman
2.	Principal Secretary, Agriculture	Member
3.	Principal Secretary, Animal Husbandry, Dairy & Fisheries	Member
4.	Principal Secretary, Marketing	Member Secretary
Invitees		
1.	Chairman, JNPT	Invitee
2.	Director General of Foreign Trade	Invitee
3.	General Manager, Indian Railways	Invitee
4.	Director, Central Excise	Invitee
5.	General Manager, Airport Authority of India, Mumbai	Invitee
6.	Commissioner, Agriculture	Invitee
7.	Commissioner, Animal Husbandry	Invitee
8.	Commissioner, Dairy Development	Invitee
9.	Commissioner, Fisheries	Invitee
10.	Director of Marketing	Invitee
11.	Managing Director, Maharashtra State Agricultural Marketing Board (MSAMB)	Invitee
12.	Representative, Export Credit Guarantee Corporation of India	Invitee
13.	Regional Head, Agricultural and Processed Food Products Export Development Authority (APEDA)	Invitee
14.	Regional Head, Marine Product Export Development Authority (MPEDA)	Invitee
15.	Representative, National Plant Protection Organization (NPPO) [Regional Plant Quarantine Station (RPQS)]	Invitee
16.	Representative, Export Inspection Council (EIC)	Invitee
17.	Representative, Fresh Fruits & Vegetables Exporters' Association.	Invitee
18.	Representative, Rice Exporters' Association	Invitee
19.	Representative, Spice Exporters' Association	Invitee
20.	Representative, Grape Exporters' Association / Mahagrapes	Invitee
21.	Representative, Onion Exporters' Association	Invitee
22.	Representative, Marine Products Exporters' Association	Invitee
23.	Representative, Meat / Animal Products Exporters' Association	Invitee
24.	Representative, Dairy Product Exporters' Association	Invitee
25.	Representative, Indian Institute of Packaging	Invitee

6.6.4 Cluster Facilitation Cell:

An approach of developing product specific clusters in different agro climatic zones of the state would help in dealing with various supply side issues viz., soil nutrients management, higher productivity, adoption of market oriented variety of crop, use of Good Agriculture Practices, organic production etc. Integration of processors / exporters with farmers will ensure better returns and stable market. State Government has identified pilot 21 such clusters, and sub-clusters, in the state, which have a high potential of export and proposed work with related agencies for facilitating export from those clusters. The cluster may be added considering rising future potential of the commodity, time to time. To execute the activities in the clusters, cluster-wise facilitation cell is proposed to be set up under the chairmanship of Director, Horticulture/ Animal Husbandry/ Dairy Development / Fisheries, M.S. The composition and representation of the cell is as follows,

No.	Authority	Designation in the committee
1	Director (Horticulture), M.S.	Chairman
2	General Manager, MSAMB, Pune.	Member
3	Representative of APEDA – Mumbai office.	Member
4	Representative of NPPO	Member
5	Project Director, ATMA Concerned District	Member
6	DSAO - Concerned District	Member
7	Divisional Dy. General Manager, MSAMB – Concerned Division	Member
8	District Deputy Registrar, Co-Op Societies - Concerned District	Member
9	Phyto-sanitary authority – Concerned district	Member
10	Representative of National /Regional research center – Concerned Commodity	Member
11	Representatives of concerned Agriculture university	Member
12	Representative of KVKs - Concerned District	Member
13	Representatives of farmer organization/ FPO/ progressive farmers – 1 from concerned district	Member
14	Nodal Officer of Nodal Agency	Member Secretary
	Invitee (Stakeholders – Exporter / Processor / Subject Expert etc.)	

9. OPERATIONAL RECOMMENDATIONS

7.1 Focus on Clusters

Government of India has emphasized the need for focusing on a cluster development approach to boost the agricultural and horticultural production in India. A similar approach in export centric clusters is likely to result in a more focused pre and post-harvest management of the production as well as in upgrading the supply chain to attain much higher levels of export from those clusters.

Quality produce and consistency in supply are the major keys in success of export. Exporting agricultural products requires significant volumes of high quality produce of the same variety with standard parameters matching import demands. Small landholding pattern and low farmer awareness in India has often meant limited volumes of different varieties of multiple crops with little or no standardization. Export oriented cluster development across States will be key to ensuring surplus produce with standard physical and quality parameters which meet export demands.

As per the tenth Agriculture Census (2015-16), number of operational holdings and area of Operational land holdings in Maharashtra was 1.53 crore and 2.05 crore ha as against 0.50 crore and 2.12 crore ha respectively as per the first Agriculture Census (1970-71). Over this period, the average size of land holding decreased from 4.24 ha to 1.34 ha. Therefore, for attaining significant volumes of high quality produce of the same variety and to acquire considerable negotiation capacities, the farmers' groups / Farmer Producer Organizations / Growers' Cooperatives need to be established. They shall be promoted for the Farmer Producer Companies, under Section IX-A of the Companies Act.

Farm Producer Organizations are an institutional innovation to help small holders overcome scale disadvantages and extend their reach to modern technology and distant markets. FPOs will be promoted by addressing obstacles faced by them and work through NABARD, SFAC and State level organizations to expand FPO network. FPOs can be reliable institutions to develop backward and forward linkages. After handholding these nurtured FPOs can be commercially viable organizations.

Possibility will be checked for creation of a corpus for export oriented activity through development of cluster as recommended by stakeholders and suggested in Country's agriculture exports policy. India's agri. export policy recommended clusters of Banana, Mango, Pomegranate, Grapes, Onion, Oranges and Onion. However following products / clusters – sub-clusters are identified based on the existing production contributing to exports, exporters operations, scalability of operations, size of export market / India's share, awareness about SPS requirements, and potential for increase in export in short term. The list of clusters provided below is tentative and could be expanded, provided the conditions for formation of cluster are met.

Proposed clusters with districts:

No.	Product	Sub-clusters and Districts Covered
1.	Banana	A. Jalgaon, Dhule, Nadurbar. B. Kolhapur, Solapur, Pune C. Parbhani, Hingoli, Nanded D. Akola, Buldana, Wardha
2	Pomegranate	A. Nasik, Ahmednagar, Pune, Solapur, Sangli, Latur, Osmanabad, B. Washim, Buldana
3	Alphonso Mango	A. Ratnagiri, Sindhudurg, Raigad
4	Kesar Mango	A. Aurangabad, Jalna, Beed, Latur, Ahmednagar, Nasik
5	Orange	A. Nagpur, Amravati, Wardha, Akola, Buldana, Washim
6	Grapes	A. Nashik, Ahmednagar, Pune, Sangli, Solapur, Osmanabad
7	Onion	A. Dhule, Nashik, Jalgaon, Ahmednagar, Pune, Satara, Solapur
8	Cashew	A. Kolhapur, Sindhudurg, Ratnagiri, Raigad, Thane, Palghar,
9	Floriculture	A. Pune, Satara, Kolhapur, Nasik
10	Raisin	A. Sangli, B. Nashik
11	Vegetables	A. Jalgaon, Nashik, Pune, Ahmednagar, B. Thane, Palghar, C. Nagpur,
12	Non-Basmati Rice	A. Nagpur, Chandrapur, Gondia, Gadchiroli, Bhandara, B. Palghar, Thane, Raigad, Pune
13	Pulses	A. Dhule, Jalgaon, Ahmednagar, Pune, B. Aurangabad, Jalana, Beed, Latur, Nanded, Parbhani, Osmanabad, C. Amravati, Akola, Buldana, Yavatmal, Wardha, Nagpur, Chandrapur
14	Cereals	A. Jalgaon, Nashik, Aurangabad, Beed, Ahmednagar, Pune, Satara, Sangli, Solapur. B. Gondia, Nagpur
15	Oilseeds	A. Buldana, Akola, Washim, Amravati, Yavatmal, Wardha, Nagpur, B. Nashik, Jalgaon, Satara, Sangli, Kolhapur, C. Jalna, Beed, Latur, Nanded, Parbhani, Hingoli,
16	Jaggery	A. Kolhapur, Pune, Satara, Sangli, Solapur B. Latur
17	Spices (A. Red Chili)	A. Nagpur,

No.	Product	Sub-clusters and Districts Covered
		B. Nandurbar, C. Buldana,
18	Spices (B. Turmeric)	A. Sangli, Satara, B. Wardha, Washim, Yeotmal, C. Hingoli, Nanded, Parbhani
19	Dairy Products (Milk, Paneer, Skimmed Milk Powder, Casein etc.)	A. Pune, Ahmednagar, Satara, Sangli, Kolhapur, Solapur
20	Fisheries	A. Thane, Mumbai, Raigad, Ratnagiri, Sindhudurg
21	Animal Products (Poultry & Poultry Products, Goat, Buffalo, Sheep, Pork)	A. Jalgaon, Ahmednagar, Nashik, Pune, Solapur, B. Yavatmal, Amravati, Chandrapur, Gadchiroli, Buldhana, Nagpur. C. Nanded, Aurangabad, Beed,

The cluster facilitation cum monitoring cell will identify the time-to-time needs and concerned members will execute the activities, in line with the approved components under Agri. Export Policy.

APEDA, MPEDA, EIC and other commodity Boards will provide the framework for ownership of the supply chain starting from farmer registrations, FPO formation, provision of quality inputs, price discovery, farmer training through technical organization and third party certification. The implementation will be done with full involvement of State agriculture / horticulture / dairy development / Animal Husbandry / fisheries Department, Cooperation & Marketing Department, Maharashtra State Agricultural Marketing Board, State Agricultural Universities, ICAR institutions and Food Processing Department. This program can be clubbed with the Public-Private Partnership for Integrated Agriculture Development (PPP-IAD) scheme under Rashtriya Krishi Vikas Yojna or under any of the PPP model as involvement of private industry is critical to market success.

The effort will be to focus on developing export oriented infrastructure in the identified cluster areas where integrated post-harvest, processing facilities, laboratories etc. would be set up with support from MOFPI (PMKSAMPADA) / DoC (TIES) / DAC&FW (MIDH) / DAHDF (IDMF), etc. to have export oriented farm production and processing in compliance with standardized protocols, packaging, sanitary and phyto-sanitary issues and linking and networking this to next level of marketing channel.

In the identified clusters, the effort would also be made for sharing of best practice in the area of smart agriculture, production of residue free commodities with traceability, use of mobile app for pest management, use of Artificial Intelligence, use of drones for monitoring and adoption of newer technologies. Renewed focus is required on seeds, pesticides, fertilizers and proper utilization of water which can increase the area under irrigation.

7.2 Promoting value added product export

7.2.1 Product development for indigenous commodities and value addition:

Post-harvest losses generally range from 5 to 10 percent for non-perishables and about 30 percent for perishables. This loss could be and must be minimized. The effective for the same is to increase the agro processing. In the country's Agri Export Policy, it is proposed that the agriculture export policy must focus on promotion of value added, indigenous and tribal products. India's export basket is dominated by products with little or no processing or value addition. Commodities identified in the indigenous category which include non-forest produce, wild herbs, medicinal plants, extracts, lac, essential oils etc. would require intense export focused research for developing exportable products along with strong branding efforts, for which stakeholders, during consultations with Government of India, have recommended for financial support.

Research and development on value added products are required. For e.g. Cashew requires boost to be exported in value added form such as cashew apple jams and pastes, flavoured cashew, etc. currently, less than 4% of cashew exports are in value added form (CNSL, Roasted/salted nuts), for which stakeholders, during consultations with Government of India, have recommended for financial package. Industry estimates suggest a significant quantity of exports head to countries which conduct limited value addition and re-export it.

Other major processed food products revealed during preliminary exercise of GoI are Biscuits & Confectionery, Indian Ethnic Foods, Cereal Preparations, Dehydrated onion, other vegetables & Frozen vegetables including Gherkin, Processed fruits- juices, concentrates. Other such potential processed food products from Maharashtra will be identified and in-kind support will be provided.

7.2.2 Promote value added organic exports - Marketing and Branding:

Changing lifestyles and inclination towards consumption of organic produce and its processed foods, provides significant growth potential in this sector which needs to be harnessed. The organic exports from India is in the range of Rs. 3450 crore (2017-18). The global trade in Organic products is estimated to be in the range of US\$ 90 billion. Therefore, the scope for improving organic exports, especially, value added organic from India is very high.

The Government of India has implemented the National Programme for Organic Production (NPOP). The national programme involves the accreditation programme for Certification Bodies, standards for organic production, promotion of organic farming etc. The NPOP standards for production and accreditation system have been recognized by European Commission and Switzerland for unprocessed plant products as equivalent to their country standards. Similarly, USDA has recognized NPOP conformity assessment procedures of

accreditation as equivalent to that of US. With these recognitions, Indian organic products duly certified by the accredited certification bodies of India are accepted by the importing countries.

Total Area under certification process in Maharashtra (2017-18) is 235690 Ha in Cultivated (Organic +In-conversion) and 68384.260 Ha. in Wild Harvest in Maharashtra. Maharashtra ranks 3rd after Madhya Pradesh and Rajasthan. Out of which 108028 Ha is organic certified area and 127660 Ha is under conversion area, which produce 375067 MTs and 2241 MTs respectively. Export of organic produce from Maharashtra is 32742 MTs worth Rs. 23170 Lakhs. Total number of farmers working under NPOP program in Maharashtra is 100213 having 2nd rank after Madhya Pradesh (310790 farmers)

The crops/ commodities/category grown organically in Maharashtra are Sugar Crops, Oil seeds, Fiber Crops, Cereals & Millets, Pulses, Medicinal plants, Spices and Condiments, Vegetables, Dry fruits, Fruits, Plantation Crops, Ornamental Plants, Tuber crop etc.

Organic products are exported to USA, European Union, Canada, Switzerland, Australia, Israel, South Korea, Vietnam, New Zealand, Japan etc.

Huge population of India abroad, desires for Indian traditional and ethnic food. Catering to their needs, there is numerous potential for export of these products. Following activities for organic products / ethnic product can be taken up, with the support of APEDA, nodal agency for implementation of NPOP.

1. The organic exporters have suggested that the gestation period for establishing an organic product in the retail market is long and cost of launching is very high. A support for product registration of organic product growing farmer with NPOP, support for buying shelf space in the organic retail chains etc. will be taken up with APEDA, nodal organization for implementation of NPOP, which in turn will coordinate the activity to enhance organic exports from Maharashtra.
2. Establish backward & forward linkage to make success the venture based on planning, production, & procurement, processing & marketing.
3. Arrange to provide awareness and trainings to the willing growers about organic production and its marketing.
4. To promote a collective growing & contract farming for production of organic food products. FPOs shall be promoted for organic production (Fresh and Processed Organic Food Products).
5. To undertake advertisement & publicity to build awareness among the consumers about the advantages of organic food & their quality assurance mechanism. To participate in national & international exhibitions & fairs.

6. The percentage of organic processed products export from India is only 5.5% of the total organic food export. Only a limited range of products are exported from India.

Organic Processed Products which can be promoted from Maharashtra are mango pulp, puree, by-products of oil crops, soya meal, cakes and few ready to eat products, sugar, edible oils etc. Maharashtra can look at exports of a whole range of value added fruits and vegetables, IQF Fruits and vegetables, Ready to eat products, Pickles, Soups and sauces, Dairy products, Processed livestock, Aquaculture products, etc.

7. There is increasing demand for ethnic food from developed nations, in the form of value added, ready-to-eat, particularly arising from the migrant Indian population across the globe. In the era of globalization and proliferating lifestyle diseases, quality conscious consumers across the world are seeking comfort, respite and health benefits in their food. Maharashtra can offer a one stop solution and provide a range of ethnic products ranging from healthy and organic to processed and convenient food. The list is big but not limited to shrikhand, ukdiche modak, thalipeeth, dishes such as spicy savjis, Puran poli, Gul poli, Sabudana Khichadi, Mattha, misal, pohe, sheera, Kadhi, Papad or related snacks such as sandge, kurdaya and sabudana papad etc.
8. Develop uniform quality and packaging standards for organic and ethnic products, to tap the international markets.
9. Capacity building in the field of organic production.

7.3 Skill development:

In the changing current era of import of agricultural products, majority of the importing countries are asking for quality; pest and disease free and complete traceable material for import. The Sanitary and Phyto-sanitary requirements are becoming stringent not only for developed countries but for developing countries like Saudi Arabia, UAE etc, too. Developing countries like USA, Japan, Australia, European Union etc. has developed a system for importing agriculture produce and provided SOP.

There is need to change the paradigm from supply driven to demand driven. The Product and Market Mix for certain crops/commodities has been analyzed as attached in Annexure – 1. For targeting the potential markets, the skill development has been accessed. For the same the capacity building of all the stakeholders i.e. growers, pack house operators, special treatment facilities, phyto-sanitary certification authorities, staff of concerned line departments, exporters, logistics supplier, custom house agents, and the new entrepreneurs etc. need to be enhanced. Their awareness about the international market demand is also important so as to improve on post-harvest management practices, sorting, grading, packing and various special treatments.

Traceability is gaining a pace in most of the developed international markets. APEDA has developed software systems for traceability like Hortinet, Mangonet, Grapenet, Ananrnet, Vegnet etc. However, it has been observed that there is need to increase the awareness among the growers about it.

Training to newly entrant exporters also important on various aspects like role of various authorities like DGFT, APEDA, NPPO, ECGC, EIC, custom house agents etc., export procedure and documentation, sanitary and phyto-sanitary requirements, forward linkages and logistics, banking in export business. Being achieved success in state level Horticulture Export Training Program and commodity specific programs (for mango in 2019) conducted by MSAMB, the scope and frequency of such program can be widen to district level and commodity based programs can be organized.

For processing of food products, work force need to be provided with skill development opportunities on a regular basis to keep pace with changing customer preferences. Apart from the work force, Capacity development of different food processors, particularly from MSME and unorganized segments is required to enable them to tap overseas markets and global agri-business value chain. Such capacity building programs can be undertaken with the support from GoI's skill development programs from various departments like DoC, MSME, MoFPI, NABARD etc.

For the same, under Cluster Development Program, On-field demonstrations, Agriculture Export Training Course, Commodity Specific Export Training Programs, Division Level Training programs, District Level Training programs for Farmers, Trainers' Training Programs, Exposure Visits (Domestic Study Tour / Overseas Study Tour) shall be arranged.

Relevant training material shall be developed, preferably in Marathi language, for dissemination of information to the stakeholders.

Such skill development/capacity building programs can be organized and coordinated by MSAMB's National Institute for Post-Harvest Training (NIPHT), Pune.

7.4 Market Development:

There are so many countries where our export is in the infant stage. Aggressive market access and market penetration is required. This will boost the exports in such countries. Since the major producer of various agro commodities, the share of export of India is merely 2.2% of the world international business. There are many international markets still to be tapped at wider scale. i.e. if we see, Canada, which is major importing country for mangoes (around 105 Million USD), where we are exporting not more than 1 Million USD. Canada is the better rate giving country with less stringent importing norms. Such international markets need to be identified for particular commodities and conduct aggressive marketing in those countries. The Product and Market Mix for certain crops/commodities has been analyzed as attached in Annexure – 1.

- a. **Market Demand Analysis for deep penetration:** For targeting existing market countries, the detailed study including their demand, their domestic production, their suppliers, suppliers' strategy, product-price matrix etc is to be done. There are some countries, which are untapped completely. Their importing norms like quality parameters, Residue Levels, Phyto-sanitary requirements, packaging requirements need to be studied and pursued with National Plant Protection Organization, Government of India for opening of such countries for our products.

Market Identification for newer products: Before entering a newer product in the international market, the product and market mapping is to be studied including the potential of the market. The market research is required. This includes identifying the market potential, learning how to properly (and legally) export our products to that market, identifying sales channels and verticals.

There are some products like Guava, Custard apples, Sapota, Herbal Products - Charoli, Mahua, Jamun etc., Maize, Local grains like Ragi, Millets – minor, pearl, Sattu arecanut, shendodi etc. for which the international markets to be explored and tapped. The standard operating procedures for such new products and new markets need to be developed.

- b. **Participations in international exhibitions/ Fairs / In-store Promotion:** On that basis the targeted promotional activities including participations in international exhibitions, organizing fairs, in-store wet marketing, brand promotion etc. can be organized. This will give rise the trust building between consumer / importers and exporters and the long term relationship will be established.
- c. **Branding:** It is also recommended that marketing campaigns be created for individual fruits or products such as “Wonderful Pom”, “Bananas of India”, “Gondia Rice”. This activity would be for a sustained communication campaign in the form of a branding

blitz across key targeted markets. This must utilize both digital and traditional media platforms.

d. Developing forward & backward linkages/ Buyer Seller Meets:

It is observed that perfect match making is required for direct linkages between exporters and buyers and exporters and importers. There will be requirement of creating a platform for buyers & sellers. For Market promotion regular buyer seller meets will be organized at district level and state level to provide the platform for growers, exporters, importers etc.

e. Marketing / branding of GI Products, organic products and ethnic products:

Maharashtra is well known for diversified products for its originality. To gain the market advantage of such products Geographical Indications (GI) are given to 26 agro products in Maharashtra. Therefore there is need for marketing and branding of these GI Products. Aggressive international marketing would be required for organic products and ethnic products of Maharashtra.

MSAMB may coordinate such international events for export promotion with the support of APEDA and Indian Embassies in abroad.

7.5 Attract private investments in export oriented activities and infrastructure:

Though interaction of private sector and public sector is not new, yet the level is very low. On the one hand, public sector has highly skilled and efficient manpower in agriculture and on the other hand, private has excellent managerial resources. Involvement of private players at this stage of value chain could help in reducing wastage and post-harvest losses of agricultural commodities as well. Government should seek to enhance participation of private sector in agriculture to improve efficiency of the value chain.

With the implementation of amended APMC Act, the participation of private sector has increased in agriculture sector in Maharashtra especially in the direct marketing, single licensee, contract farming, and setting up of private markets. Direct marketing and contract farming is proved as a boon to the exporters. However, private investment in agriculture has also been slow and must be stimulated. Accelerated private investment can be beneficial for both private and public sector. The areas where private investment could make effective results are as under –

1. Pre harvest management – Germplasm import and evaluation, input supply, accelerated technology transfer, mechanization at farm level.
2. Post Harvest Management - Collection Centers, Packhouse, Testing Labs, Special Treatment infrastructure, Logistics.
3. Infrastructure for agro processing.
4. Infrastructures at Railway stations, Sea Ports, Airports.
5. Support in market access and development activities.

7.6 Ease of Doing Business (EODB) & Digitization:

7.6.1. Land Digitization:

India's Agri. Export Policy mentioned about register land records, digitization of land records, geo-mapping of lands, registration of farmers and farm producer organizations (FPOs) and carry out satellite mapping of lands while linking these details to farmer AADHAR cards. This will help in establishing traceability, market linkages and plugging leakages in public funds. State Government will coordinate successful implementation of such digitization to facilitate consolidation and aggregation of land holding for export oriented cultivation.

7.6.2 Market Intelligence cell:

For decision making at Government level and trade level, the updated and errorless information is the key parameter. APEDA and MPEDA run 'agri exchange portal' and 'fish exchange portal' respectively. India Trade portal is operated by FIEO with the support of DoC and it provides information relating to tariff scenarios in FTA and non-FTA situations, the SPS notifications and also provides a window for Indian Embassies to offer market leads. Thus, relevant information on market intelligence is scattered in different web. It is proposed at Central level to develop an integrated online portal for real time updates relating to tariff, non-tariff, documentation, pesticide & chemical MRL notifications. This portal will facilitate exporters to make well-informed decisions related to markets, pricing, hedging and SPS notifications. The portal may also include a grievance redressal mechanism allowing exporters to flag off market related issues and challenges. Manual of Importing Country Requirements (MICOR) for all the major agriculture products exports from India for all major importing countries are also proposed. The exporters would be able to look up for requirements of importing country and comply, minimizing the risk of rejection of exported consignments.

The information will be analysed in context of Maharashtra State and will be disseminated through concerned State Government websites and circulated among various training programs being conducted in the state, to keep the stakeholders updated. Regular workshops with exporters are also envisaged in this regards. MSAMB may coordinate this activity.

7.6.3 Trade procedures and facilitation:

Exporters reveal that lengthy and cumbersome documentation and operational procedures at ports are a constant challenge. They have often recommended implementing 24 x 7 single window clearances of perishables imports and exports at key ports across the nation. It is equally important to station more quarantine officers at strategically important ports. Considering the limited manpower of NPPO, the proposal may be forwarded to NPPO for third party inspections with the support of State Agriculture Department and/or MSAMB.

7.6.4 Grievance Redressal Cell:

Importers of Agriculture products from India interact with Indian missions abroad to inform about their grievance. In order to provide follow-up and resolution of issues relating to export grievances the Trade Disputes Cell in the DGFT Office has been functional.

State Government will act as a coordinator for issues to be taken up or follow-up of the disputes of exporters and importers with the said Grievance Cell and shall be responsive for any of the action to be taken up at grass root level, for compliance.

7.7 Developing Sea Protocol:

Considering the competitiveness of Indian agro produce in the International market, the study reveals that the air freight has a major contribution in the cost of the export consignment. Therefore there are limitations in competition for our produce in the international market. Developing sea protocols for perishables must be taken on priority for long distance markets. Export of perishables requires special storage, transportation and handling at desired temperatures. Hence it is necessary to export the agro produce by sea route. However, the perishability of F&V is the bottle neck. Therefore there is need to develop the protocol for export of F&V by sea route to distant markets like USA, European Union, Russia etc. Therefore with the support from BARC, APEDA, NPPO, National Research Centers, Agriculture Universities protocol/s is to be developed. This will help in exporting perishable consignments through sea route.

The landed cost of our produce shipped by sea will be competitive and hence more and more produce will be exported. As per our experience, in the initial phase, during establishing the protocol, exporters have their reservations to step-in such activity, due to the fear of quality issues. Therefore we suggest supporting to the exporters for such long distance consignments by sea. In view of MSAMB's experience in developing sea protocol and suitable infrastructure available, MSAMB may coordinate such activity of developing sea protocols, with the support of APEDA and State Government.

India's Agri Export Policy mentioned that the trials of sea protocol held at strategically important ports across India are an immediate requirement that must be taken up on war-footing, to start with MSAMB undertook sea shipment trail of mangoes to London, United Kingdom. The consignment reached in good condition and got overwhelming response in the London market. Net returns are also encouraging. This experience shall be utilized for tapping other ports in Europe and long distant markets. MSAMB has conducted simulation trail of mangoes with Bhabha Atomic Research Centre for USA shipment, after irradiation, the response of the trial is also encouraging. Being success of this simulation trial, we can oversee the commercial consignment to USA in the next mango season.

Hiring of International Consultants:

In export of various agro products, many supplier countries are leaders and are having major share in the international market i.e. Ecuador and Philippines in Banana, USA in processed products, The Netherlands in flowers, Israel, New Zealand, Denmark etc. They have proven technology in pre and post-harvest. For developing protocols of some of the products in Maharashtra, the international experts from concerned countries may be hired for certain period.

7.8 SPS and TBT Response Mechanism:

Apart from tariff barriers, which have been declining over the years on account of Free Trade Agreements & Regional Trade Agreements, the Non-Tariff Barriers (NTBs) and stringent quality/phyto-sanitary standards are becoming the norm for restricting/preventing market access. It is common knowledge that issues relating to market access go on for months, sometimes years together before countries allow market access for products. It is necessary to respond to rapid alerts and warnings and to ensure that the concerns/problem areas percolate to the producers/processors and exporters. In the absence of a response mechanism, the likelihood of temporary restriction/ ban looms large and sometimes it may take years to lift the ban.

Apart from response to rapid alerts, the market access efforts require submission of pest risk analysis, dossier on animal health and disease control program, addressing safety concerns of the importing countries/intending countries. Given the multiplicity of Departments/Agencies responsible for submitting/responding to these issues, it takes an unusually long time to respond, resulting in delay in market access.

In view of the above, in the India's Agri. Export Policy, it is suggested to create an institutional mechanism under the aegis of Department of Commerce with representation of relevant Ministries, Agencies to address India's market access request, calibrate it with trading partner's market access request for accessing the Indian market and quickly respond to SPS/TBT barriers. As part of the Agriculture Export Policy, the Department of Commerce proposes to develop a common portal to monitor all export rejections and provide a platform to different nodal agencies to take up a root cause analysis, take corrective action and in case of requirement, respond to the partner country regarding action taken.

Considering the major export of agro produce from Maharashtra, the involvement of the stakeholders from Maharashtra (exporters/ processors/ growers / state authorities) are more. It is obvious that the response of Maharashtra towards rapid alert and/or non-compliance should be immediate. Maharashtra has more potential products; hence the activities of market access are also to be undertaken at grass root level in the state. Hence under the nodal agency, State shall constitute a committee, involving representatives of concerned departments and regional authorities, to response on the same.

7.9 Traceability System :

Hortinet collects, stores and reports – forward and backward traces and quality assurance data entered by the stakeholders, i.e. The Farmers, State Government Horticulture Departments, The testing laboratories, Agmark Certification Department, The Phyto-sanitary department, Pack houses, Exporters, etc. within the supply chain in India. Importers can also register with this system to access reports on the consignments exported to them.

APEDA established Hortinet software for Grapenet, Mangonet, Anarnet, Vegnet, Betel net and Citrus net for establishing traceability. On this line, it is also essential to establish traceability for Onion and Banana, as per the Standard Operating Procedure (SOP) of the importing countries. It is necessary to make cluster based awareness campaign for the stakeholders.

Hortinet traceability system shall be implemented with the help of State Government through the participation of farmers. The District Superintendent Agriculture Officer will be responsible to increase exportable farm registration under traceability system, issue of package of practices, exportable quality production, audit of registered farms, fortnight pest monitoring of registered and approved farms and providing details of approved farms to APEDA and exporters. Farmers should be protected with the booklets containing all the details of package of practices.

The required infrastructure facilities will be established including quarantine inspection area with pathology, entomology and nematology lab facilities.

A State level Hortinet traceability system review committee is already established under the chairmanship of Director, Horticulture to discuss the issues as regards to exports with the concerned stakeholders. This will continue for effective implementation of phytosanitary requirements.

A geographical indication (GI) is a sign used on products that have a specific geographical origin and possess qualities or a reputation that are due to that origin. In Maharashtra around 26 agro commodities are registered under GI. Therefore the growers registered under GI shall be mapped with the HORTINET system, so that all the stakeholders can access database of GI registered growers. This will give effective implementation of GI registration and its commercial use.

7.10 Importing export oriented germplasm & planting material:

The long gestation period in seed development and commercialization is indeed a costly barrier to boosting productivity. The private sector has displayed apprehension in technology transfer due to lack of adequate regulation and protection of Intellectual Property (IP) Rights. There is a need to import plant and planting material for having the new varieties as per international market demands like less pungency in onion and garlic, higher yield, bigger fruit size, better shelf life, process worthy variety, pests and disease resistance etc. This will

enable us to extend its seasonality window for marketing in importing countries. These varieties also have to be resistant to identified pests and diseases prevalent in the country.

As per the demand received from stakeholders growers or exporters, the state government will initiate import of export oriented germplasm & planting material and its trials with universities/ research centers/exporters.

7.11 Research and Development

To achieve widely acceptability of our product in the international market and to make it competitive, there is need to identify and utilize resources for export-oriented product development and quality testing of identified commodities. e.g. issue like spongy tissue in alphonso mango, premium variety need to addressed. Interventions are required through R & D activity. Agri Export Policy of India mentioned about suggestions on interventions required in R & D sector would be sought from stakeholders to ascertain the financial implications.

a. Improvement of product quality:

Agricultural research and development (R&D) led by private industry along with higher infrastructure spend by the government will be the key to boosting agricultural exports. Along with this, innovations in packaging, improving shelf life of products and greater R & D in developing products to suit the palates of importing countries would be a priority.

The Autonomous Bodies under State Governments with the support from Department of Commerce, including Indian Institute of Packaging may work with the stakeholders, MoFPI, ICAR, Council of Scientific & Industrial Research (CSIR) will work in this direction.

b. Protocol Development for newer market:

Development of protocol for export for specific market: R&D activity will need to be conducted to take trials as per the revised norms of importing countries. Accordingly it can fit into the protocol form export of commodity to desired international market. A study has been carried out by Vapour Heat Treatment on bitter gourd for export to EU.

c. To identify pest free area for Agri/Horti. Products required for export to certain countries :

Some importing countries have laid down their phyto-sanitary norms, for which the catchment area is need to be declared as a certain pest free zone. e.g. Saharanpur district of Uttar Pradesh has been declared from mango pulp weevil, *Sternochetus frigidus* (MPW), mango seed weevil, *S. mangiferae* (MSW). This activity is to be carried out by Regional Plant Quarantine Stations with the help of State Agriculture / Horticulture Department or Agriculture Universities as per the guidelines laid down by National Plant Protection Organization, Faridabad under Ministry of Agriculture and Farmers Welfare, GOI. The activity will be monitored and reviewed by the concerned cluster facilitation cell.

During the transition phase of technology transfer, the private exporters are reluctant to invest, due to fear of probable quality issues. Therefore there would be need of financial support for initial pilot projects.

7.12 Use of Agri-start-up fund:

Agri Export policy of the country mentioned that entrepreneurs are to be supported to start a new venture in Agri products exports during their initial period of establishment. Proposals received showing work on a new concept / product / project would be referred to the fund manager for its evaluation and provide funding for the deserving proposals which are going to aid in increasing agricultural exports from the country. For e.g. use of IT in the agriculture value chain including precision farming, plant health monitoring, use of drones for precision agriculture, packaging, tracking of produce in transit may be supported by the Fund.

Such proposal, if any, received from exporters / their association / stakeholders in the common interest to boost the exports from Maharashtra, will primarily be evaluated at State Level Steering Committee and will be submitted to concerned authority which will administer the Agri-start-up fund. The state government will make awareness about such funds among the potential beneficiaries.

Annexure – I

International Product – Market Mix Analysis:

Crop	Production# (Lakh MTs)		Export from India (Lakh MTs)**	Current Destinations**	Major importing countries*	Supplier countries*	Target Country	Infrastructure Required	Projection – Qty. Lakh MTs India (Maharashtra)
	India	Maharashtra (% of India) Rank in India							
Banana	291.35	30.25 (10.38%) Rank 5	1.345 (0.45%)	UAE, Oman, Iran, Saudi Arabia, Nepal, Qatar, Kuwait, Afghanistan, Bahrain, Malaysia	USA, Belgium, Russia, Japan, UK, Netherlands, China, France, Italy, Canada, Korea, Poland (16431.54 Lakh MTs)	Philippines, Ecuador, Brazil and Indonesia	Middle East Countries, SEA Countries, Europe (UK & Germany)	Export Facility Center (Water Tanks, Precooling, Cold storage, Packhouse, Grading-Packing Line/Tables)	3.00 (1.50)
Pomegranate	23.06	14.86 (64.43%) Rank 1	0.679 (2.94%)	UAE, Netherlands, Saudi Arabia, Bangladesh, Oman, Nepal, Qatar, Thailand, UK,	Middle East Countries, South East Asian Countries, UK, Germany	Spain, Turkey, USA, India, South Africa, Peru, Argentina	Europe (UK, Germany, Netherlands), USA, Middle East Countries,	Export Facility Center (Precooling, Cold storage, Packhouse, Grading-Packing Line/Tables)	2.00 (1.50)

Crop	Production# (Lakh MTs)		Export from India (Lakh MTs)**	Current Destinations**	Major importing countries*	Supplier countries*	Target Country	Infrastructure Required	Projection – Qty. Lakh MTs India (Maharashtra)
	India	Maharashtra (% of India) Rank in India							
				Shrilanka				Irradiation Facility for USA.	
Mango	186.43	4.63 (2.48%) Rank 10	0.465 (0.25%)	UAE, UK, Oman, Qatar, USA, Bangladesh, Kuwait, Saudi Arabia, Nepal (Rs. 406 Crores) – Rank 7 th in the world	USA, Netherlands, Germany, UK, China, UAE, France, Canada, Spain (14.45 Lakh MTs, Rs. 10919 Crores)	Mexico, Peru, Brazil, Thailand, Philippines, Netherlands	Europe (UK, Germany, Netherlands, Italy, France, Switzerland), Canada, USA, Australia, Japan, New Zealand, South Korea, Middle East Countries, SEA Countries,	Irradiation Facility for USA & Australia, Export Facility Center (Precooling, Cold storage, Packhouse, Grading-Packing Line/Tables, Hot Water Treatment for 48 Degree 60 Mins and 52 Degrees for 3	2.00 (1.50)

Crop	Production# (Lakh MTs)		Export from India (Lakh MTs)**	Current Destinations**	Major importing countries*	Supplier countries*	Target Country	Infrastructure Required	Projection – Qty. Lakh MTs India (Maharashtra)
	India	Maharashtra (% of India) Rank in India							
								Mins.)	
Oranges	41.13	7.69 (18.70%) Rank 3	0.00408 (0.01%)	Nepal, UAE, Oman, South Africa, UK, Bahrain	Russia, USA, France, UK, Canada, Netherlands, Poland, Belgium, Indonesia, Italy, China, Sweden, Norway, Austria (32.14 Lakh MTs)	USA, Australia, China, Pakistan, Israel, Morocco, Italy, Spain, South Africa	Middle East Countries, Europe (UK, Germany, Netherlands)	Export Facility Center (Precooling, Cold storage, Packhouse, Grading-Packing Line/Tables, Waxing arrangement)	0.50 (0.10)
Onion	209.31	65.29 (31.19%)	21.83 (10.43%)	Bangladesh, UAE, Malaysia, Srilanka, Nepal, Saudi Arabia,	USA, Malaysia, UK, Germany, Canada,	Netherlands, India, Mexico, China,	Europe (UK, Germany, Netherlands, Italy,	Export Facility Center (Cold storage, Packhouse,	25.00 (20)

Crop	Production# (Lakh MTs)		Export from India (Lakh MTs)**	Current Destinations**	Major importing countries*	Supplier countries*	Target Country	Infrastructure Required	Projection – Qty. Lakh MTs India (Maharashtra)
	India	Maharashtra (% of India) Rank in India							
		Rank 1		Kuwait, Qatar, Oman, Indonesia, Philippines, Vietnam, Singapore, Bahrain	Russia, Netherlands, UAE, Srilanka, France, Belgium, Indonesia (55.81 Lakh MTs)	USA, Spain, Egypt	France), USA, Middle East Countries, SEA Countries, Russia, Srilanka, Nepal, Myanmar	Grading-Packing Line) Irradiation Facility for USA, Europe, Middle East and South East Asian Countries.	
Spices (A. Turmeric##)	12.15	2.25 (18.51%) Rank 2	1.07 (11.37%) Majority of the export is from JNPT.	USA, Iran, UAE, Malaysia, Morocco, UK, Srilanka, Germany, Japan, Saudi Arabia, Netherlands	USA, Iran, Malaysia, UAE, Germany, Netherlands, Japan, Bangladesh	India, China, Myanmar, Nigeria and Bangladesh	Europe (USA, UK, Germany, Netherlands) & Middle East Countries.	Irradiation Facility for USA & Europe	1.50 (0.50)

Crop	Production# (Lakh MTs)		Export from India (Lakh MTs)**	Current Destinations**	Major importing countries*	Supplier countries*	Target Country	Infrastructure Required	Projection – Qty. Lakh MTs India (Maharashtra)
	India	Maharashtra (% of India) Rank in India							
(B. Chilli ##)	23.94	0.0343 (0.14%) Rank 12	0.444 (18.54%) Majority of the export is from JNPT.	Vietnam, Thailand, USA, Srilanka, Malaysia, Indonesia, UAE, Bangladesh, China, UK, Oman, Nepal, Mexico	USA, UAE, Srilanka, Bangladesh, Malaysia, Bangladesh, Chile, China, Egypt, Ethiopia, Greece, Guatemala, Indonesia	Mexico, Thailand, China, Jamaica, Korea, Malaysia, Ethiopia	Europe (USA, UK, Germany, Netherlands) & Middle East Countries.	Irradiation Facility for USA & Europe	7.00 (0.25)
Floriculture (Roses, Jasmine, Marigold, Gerbera, Carnation)	16.59 (loose flowers) & 4.84 (cut flowers)	0.31 (9%) Rank 5	0.197 (0.92%)	USA, Netherland, UK, Germany, Singapore, UAE	Germany, Netherlands, USA, UK, France, Japan, Russia, Italy, Switzerland, Belgium, Austria, Denmark, Poland	Netherlands, Colombia, Germany, Ecuador, Italy, Kenya, Belgium, Spain (India Ranks 28 th)	SEA Countries, Europe (UK, Netherlands, France, Switzerland)	Export Facility Center (Precooling, Cold storage, Packhouse, Grading-Packing Line/Tables)	0.40 (0.15)

Crop	Production# (Lakh MTs)		Export from India (Lakh MTs)**	Current Destinations**	Major importing countries*	Supplier countries*	Target Country	Infrastructure Required	Projection – Qty. Lakh MTs India (Maharashtra)
	India	Maharashtra (% of India) Rank in India							
					(116.80 Lakh MTs)				
Vegetables (Okra, Green Chilli, Brinjal, Drumsticks, Curry Leaves, Bitter Gourd, Bottle Gourd, Cabbage, Cauliflower)	1750.08	103.61 (6%) Rank 6	7.21 (0.41%) (7th Rank in the world)	Middle East Countries, South East Asian Countries, UK, Germany	USA, Germany, UK, India, France, Canada, Netherlands, Japan, Vietnam, Belgium (\$75.2 Billion = Rs. 526400 Crores)	China, USA, Germany, Netherlands, Japan, France, India, Italy, UK, Spain, Belgium	(Where the Indian ethnic population is Considerable – More than 1 Lakh) i.e. USA, Saudi Arabia, Nepal, UAE,	Export Facility Center (Precooling, Cold storage, Packhouse, Grading-Packing Line/Tables)	15.00 (4.00)

Crop	Production# (Lakh MTs)		Export from India (Lakh MTs)**	Current Destinations**	Major importing countries*	Supplier countries*	Target Country	Infrastructure Required	Projection – Qty. Lakh MTs India (Maharashtra)
	India	Maharashtra (% of India) Rank in India							
							Malaysia, United Kingdom, Canada, Myanmar, Oman, Sri Lanka, Kuwait, Qatar, Singapore, Germany, Bahrain, Philippines, Italy, Netherlands, Indonesia.		
Non-Basmati Rice			75.99 (Rs. 21186 Crores)	Nepal , Benin, Senegal, Bangladesh Pr, and Guinea,	Bangladesh, Nepal, Srilanka, African	India, China	Middle East Countries, SAE Countries, African	Cleaning, Sorting (Sortex), Grading and Packing line,	100 (10.00)

Crop	Production# (Lakh MTs)		Export from India (Lakh MTs)**	Current Destinations**	Major importing countries*	Supplier countries*	Target Country	Infrastructure Required	Projection – Qty. Lakh MTs India (Maharashtra)
	India	Maharashtra (% of India) Rank in India							
				UAE	Countries		Countries	Packhouse.	

* COMTRADE, United Nations.

** DGCIS, GoI.

National Horticulture Board– 2016.

Spices Board 2017.

Annexure – 1**Potential of Maharashtra:****A. Production:****a. Fruits & Vegetables:**

Produce	Production in Lakh MTs		Maharashtra's Share %	Rank in India
	India	Maharashtra		
Grapes	25.95	21.60	83	1
Pomegranate	13.50	9.50	70	1
Onion	194.00	58.7	30	1
Banana	297.30	48.30	16	2
Oranges/Citrus	100.90	16.30	16	2
Mango	184.30	12.10	7	6
Total Fruits	812.90	97.90	12	2
Total Vegetables	1621.90	80.00	5	8

b. Cereals:

Crop	Production in Lakh MT		Maharashtra's Share %	Rank
	India	Maharashtra		
Jowar	44.1	13.1	29.71	1
Soybean	85.9	21	24.45	2
Tur	24.6	4.7	19.11	2
Gram	71.7	7.3	10.18	4
Maize	218.1	15.1	6.92	6
Bajara	80.6	3.4	4.22	6
Rice	1043.2	26.3	2.52	15
Wheat	935	7.6	0.81	10

B. Export :**a. Fruits:**

Crops	India		Maharashtra		Maharashtra's Share (%)	Rank
	Qty. (MT)	Value (Rs. In Crores)	Qty. (MT)	Value (Rs. In Crores)		
Grape	210220	2289	200203	2106	95	1 st
Mango	49178	382	35343	309	72	1 st
Pomegranate	47335	538	32652	412	69	1 st
Banana	101309	349	44558	149	44	1 st
Sapota	1601	9	1562	9	97	1 st
Custard Apple	779	7	754	7	97	1 st
Papaya	9984	42	6655	30	67	1 st
Mango pulp	110924	674	20659	156	19	3 rd
Other Fresh Fruits	177866	686	50176	225	28	2 nd
Other processed fruits	391284	3405	119043	1070	30	2 nd

b. Vegetables:

Crops	India		Maharashtra		Maharashtra's Share (%)	Rank
	Qty. (MT)	Value (Rs. In Crores)	Qty (MT)	Value (Rs. In Crores)		
Onion	1588978	3088	1054618	1971.7	66	1 st
Green Chilli	44897	220	33948	193.22	76	1 st
Garlic	23999	145	15799	96	66	1 st
Other vegetable	18464	104	4378	27.3	24	1 st
Sweet corn	13836	65	11837	52	86	1 st
Okra	2992	33	2115	20.9	71	1 st
cucumber	484	2	441	1.5	91	1 st
Bottle gourd	60	4	43	2.8	72	1 st
Mixed vegetable	147653	672	28756	170	19	2 nd

c. Cereals:

Crops	India		Maharashtra		Maharashtra's Share (%)	Rank
	Qty. (MT)	Value (Rs. In Crores)	Qty (MT)	Qty. (MT)		
Maize	569296	1030	124213	213	22	2nd
Non-Basmati Rice	6820772	17145	761459	1972	11	3rd
Pulses	124882	1140	78495	714	63	1st
Other cereals	168638	396	40560	104	24	1st