

Agriculture Export Policy



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Abbreviations

AEP – Agriculture Export Policy
AEZ - Agri Export Zones
APEDA - Agricultural and Processed Food Products Export Development Authority
APMC - Agricultural Produce Marketing Committee
ASEAN - Association of Southeast Asian Nations
CAGR - Compound Annual Growth Rate
CIB - Central Insecticide Board
CNSL - Cashew Nut Shell Liquid
CPC - Centre for Perishable Cargo
CSIR - Council of Scientific & Industrial Research
DAC&FW - Department of Agriculture, Cooperation and Farmer Welfare
DAHDF - Department of Animal Husbandry, Dairying and Fisheries
DARE - Department of Agricultural Research and Education
DAY-NRLM -Deendayal Antyodaya Yojana - National Rural Livelihoods Mission
DFPD - Department of Food and Public Distribution
DoCA - Department of Consumer Affairs
DGFT - Directorate General of Foreign Trade
DoC – Department of Commerce
EIC – Export Inspection Council
EFSA - European Food Safety Authority
E-NAM – Electronic National Agriculture Market
EPC- Export Promotion Council
EU - European Union
FAMA - Federal Agricultural Marketing Authority
FDI - Foreign direct investment
FIEO - Federation of Indian Export Organizations
FOB - Free on Board
FOREX – Foreign Exchange
FPO - Farmer Producer Organizations
FSSAI- Food Safety and Standards Authority of India
FSVPS - Federal Service for Veterinary and Phytosanitary Surveillance (Rosselkhoznadzor)
FTA – Free Trade Agreement
GAP - Good Agricultural PracticesGCC - Gulf Cooperation Council
GDP - Gross Domestic Product
GI - Geographical Indication
GST - Goods and Services Tax
HPMC - Himachal Pradesh Horticultural Produce Marketing and Processing Corporation Ltd.
IARI- Indian Agricultural Research Institute
IBEF - India Brand Equity Foundation
ICAR - Indian Council of Agricultural Research
ICD/CFS - Inland Container Depots / Container Freight Stations
IDMF - Integrated Development and Management of Fisheries
IP - Intellectual property

IQF - Individual Quick Freezing
IT – Information Technology
MARKFED - The Punjab State Co-op Supply & Marketing Federation Ltd.
MEP - Minimum Export Price
MIDH - Mission for Integrated Development of Horticulture
MoFPI - Ministry of Food Processing Industries
MPEDA - Marine Products Exports Development Authority
MRL - Maximum Residue Limit
MSME - Micro, Small & Medium Enterprises
NABL - National Accreditation Board for Testing and Calibration Laboratories
NPOP - National Programme on Organic Production
NPPO - National Plant Protection Organization
NSSO - National Sample Survey Office
NTB - Non-Tariff Barriers
PMKSAMPADA - Pradhan Mantri Kisan Scheme for Agro-Marine Processing and Development of Agro-Processing Clusters
PPP-IAD - Public-Private Partnership for Integrated Agriculture Development
R&D – Research and Development
RMP - Residue Monitoring Plan
SEZ - Special Economic Zones
SHG – Self Help Group
SPS - Sanitary and PhytoSanitary
TBT - Technical Barriers to Trade
TIES - Trade Infrastructure for Export Scheme
UAE - United Arab Emirates
US – United States of America
US FDA - United States Food and Drug Administration
USDA - United States Department of Agriculture
WTO - World Trade Organization

Agriculture Export Policy

Introduction

India, with a large and diverse agriculture, is among the world's leading producer of cereals, milk, sugar, fruits and vegetables, spices, eggs and seafood products. Indian agriculture continues to be the backbone of our society and it provides livelihood to nearly 50 per cent of our population. India is supporting 17.84 per cent of world's population, 15% of livestock population with merely 2.4 per cent of world's land and 4 per cent water resources. Hence, continuous innovation and efforts towards productivity, pre & post-harvest management, processing and value-addition, use of technology and infrastructure creation is an imperative for Indian agriculture. Various studies on fresh fruits and vegetables, fisheries in India have indicated a loss percentage ranging from about 8% to 18% on account of poor post-harvest management, absence of cold chain and processing facilities. Therefore, agro processing and agricultural exports are a key area and it is a matter of satisfaction that India's role in global export of agricultural products is steadily increasing. India is currently ranked tenth amongst the major exporters globally as per WTO trade data for 2016. India's share in global exports of agriculture products has increased from 1% a few years ago, to 2.2 % in 2016.

Recent growth rates show that agri-food production is rising faster than growth in domestic demand, and volume of surplus for export is witnessing accelerated growth. This offers scope and opportunity for capturing overseas markets to earn foreign exchange and enable producers to earn higher prices for farm produce.

2. Agriculture Export Policy: Objective and Vision

A dynamic nation of 1.3 billion consumers with rising discretionary incomes, changing food patterns, vast farming area, diverse agriculture and a large population dependent on agriculture has propelled India to the world's center stage as a big consumer market and also as a key supplier of food products. It has often been suggested that an essential element of "Make in India" has to be "Bake in India", i.e. a renewed focus on value addition and on processed agricultural products. The rapidly growing global population and shrinking farmlands, coupled with changing socio-economic, agro-climatic and dietary patterns, have challenged scientists and policymakers to reconsider how we grow and feed 7.5 billion global citizens. India's quest, then, is to grow sustainably, trade abundantly and progress harmoniously. Agriculture export, if properly supported by infrastructure, institutional back up, packaging, freight transport and connected to the internal production system backed by market access will be in a position to transform the agricultural economy.

Challenges, however, are aplenty; from low farm productivity to poor infrastructure to global price volatility to market access. The vision of Prime Minister Shri Narendra Modi to double farmer's income by 2022 would require a series of interventions to improve production and productivity, better price realization for farm produce, along with economizing the cost of production. There has been a long felt need for a dedicated agricultural export policy in India.

The need for a dedicated policy under Department of Commerce (DoC) overarching umbrella arises due to the federal and administrative structure of the Union and State government. While the Department of Agriculture, Cooperation and Farmer Welfare (DAC&FW) and Department of Animal Husbandry, Dairying and Fisheries (DAHDF) focus on production, pre-harvest and boosting farmer income, the Ministry of Food Processing Industries (MoFPI) focuses on value addition, post-harvest losses and employment generation. The DoC, on the other hand, is focused on foreign trade across sectors. There is an increasing need for the Government of India to establish a stable and predictable Agriculture Export Policy which aims at reinvigorating the entire value chain from export oriented farm production and processing to transportation, infrastructure and market access. The Agriculture Export Policy has to be dovetailed with existing framework for agriculture and surplus agricultural produce. There is a symbiotic relationship between a framework for sustainable agriculture on the one hand and a viable Agriculture Export Policy on the other. There is a need to craft a policy that will deliver incomes into the pockets of farmer through crucial export opportunities.

The Agriculture Export Policy is framed with a focus on agriculture export oriented production, export promotion, better farmer realization and synchronization within policies and programmes of Government of India. It is required to have a "Farmers' Centric Approach" for improved income through value addition at source itself which will help to minimize losses across the value chain. India needs to have farmer oriented strategy to achieve the twin objective of food security and a prominent agriculture exporter of the world. The policy will also give a big push to food processing/manufacturing to have much higher growth in food production which will increase India's share of value added processed products in its Agriculture export basket at the global level. The broad objectives and vision is highlighted below.

INDIA'S AGRICULTURE EXPORT POLICY- OBJECTIVES

- To double agricultural exports from present ~US\$ 30+ Billion to ~US\$ 60+ Billion by 2022 and reach US\$ 100 Billion in the next few years thereafter, with a stable trade policy regime.
- To diversify our export basket, destinations and boost high value and value added agricultural exports including focus on perishables.
- To promote novel, indigenous, organic, ethnic, traditional and non-traditional Agri products exports.
- To provide an institutional mechanism for pursuing market access, tackling barriers and deal with sanitary and phytosanitary issues.
- To strive to double India's share in world agri exports by integrating with global value chain at the earliest.
- Enable farmers to get benefit of export opportunities in overseas market.

INDIA'S AGRICULTURE EXPORT POLICY-VISION

Harness export potential of Indian agriculture, through suitable policy instruments, to make India global power in agriculture and raise farmers income.

3. Current Agri Trade Scenario

World agricultural trade has been relatively stagnant in the last five years (2013-2017) due mainly to fall in global prices. The sharp drop in oil prices was a major contributor to softening of global agricultural commodity prices. However, volume of trade did not decline which show strong demand in global market. Due to effect of fall in global prices and back to back to drought during 2014-15 and 2015-16 India's agricultural export ¹ dropped by -5% CAGR from US\$ 36 Billion in FY13 to US\$ 31 Billion in FY17². However, with normal production in year 2016-17 India's agri exports have recovered significantly despite tight global market situation. A comparative analysis of India's ten year agri exports reveals an encouraging picture. Indian agricultural exports grew at 9% compared to China (8%), Brazil (5.4%) and US (5.1%) between 2007 and 2016. During this period, exports of coffee, cereals, horticultural produce doubled; while exports of meat, fish, processed products grew between three to five times. Despite this, India's agri exports are lower than countries like Thailand and Indonesia with much smaller agricultural land.

Indian agriculture today is structurally different than what it was during the Green Revolution era. Between the early-1970s and the late-nineties, India's annual farm Gross Domestic Product (GDP) expanded from about US\$25 billion to over US\$100 billion. During this initial period, the growth was sluggish and it was largely cereals-centric, limited to wheat and rice. However, between 2000 and 2014, the country's agricultural production has surged from US\$101 billion to about US\$367 billion, driven mainly by high-value segments such as horticulture, dairy, poultry and inland aquaculture. No other country has a more diverse food and non-food agriculture base as India and this generates the optimism that India can be a leading player in the world agricultural trade.

India's export basket is a diversified mix led by rice (US\$ 6 Bn), marine products (US\$ 5.8 Bn), and meat (US\$ 4 Bn) which together constitute ~52% of its total agri exports³. While India occupies a leading position in global trade of aforementioned agri products, its total agri export basket accounts for little over 2% of world agri trade, estimated at US\$ 1.37 Trillion⁴. An important reason for this apparently inward looking policies of India are largely aimed at food security and price stabilization.

India has remained at the lower end of the global agri export value chain given that majority of its exports are low value, raw or semi-processed and marketed in bulk. The share of India's high value and value added agri produce⁵ in its agri export basket is less than 15% compared to 25% in US and 49% in China⁶. India is unable to export its vast horticultural produce due to lack of uniformity in quality, standardization and its inability to curtail losses across the value chain. Given the globalization of value

¹ HS Code Chapters 1-23

² Source: DGCIS

³Data pertains to 2016-17, Source: DGCIS

⁴ Source: ITC (Chapter 1-23)

⁵ HS Code Chapters 7,8,16,20,21

⁶Source: ITC

chains, it is imperative that the country make concerted efforts to boost exports of high margin, value added and branded processed products. The policy will involve a paradigm shift from residual export after meeting domestic demand to targeted export according to preferences of overseas market.

Top exportable agricultural commodities and products would be identified on the basis of current global and Indian trade. Each commodity would be studied in detail based on five key criteria: global trade, five-year impact potential, India’s current competitiveness, scope for value addition and future market potential. About ten commodities would be shortlisted as focus commodities for specific farm, infrastructure and market intervention.

Preliminary analysis shows very high potential for: Shrimps, Meat, Basmati & non-Basmati Rice, Grapes, Bananas, Pomegranate, vegetables including Potatoes, Processed / Value added products, Cashew, Plant parts/medicinal herbs in value added forms including herbal medicines, food based nutraceuticals, aromatics, spices (cumin, turmeric, pepper), Ethnic & Organic Food.

4. **Elements of the Agriculture Export Policy Framework**

The policy recommendations in this report 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.

Strategic	Policy Measures
	Infrastructure and Logistics Support
	Holistic Approach to boost exports
	Greater involvement of State Governments in Agri Exports
Operational	Focus on Clusters
	Promoting Value added exports
	Marketing and promotion of “Brand India”
	Attract private investments into production and processing
	Establishment of Strong Quality Regimen
	Research & Development
	Miscellaneous

5. **Strategic Recommendations**

5.1 Policy Measures: Discussions with public and private stakeholders across the agricultural value chain highlighted certain structural changes that were required to boost agricultural exports. These comprise of both general and commodity specific measures that may be urgently taken and at little to no financial cost. The subsequent gains, however, are aplenty.

5.1.A. Stable Trade Policy Regime: Given the domestic price and production volatility of certain agricultural commodities, there has been a tendency to utilize trade

policy as an instrument to attain short term goals of taming inflation. Such circumstantial measures are often product and sector specific, for instance, the ad-hoc ban or imposition of Minimum Export Price (MEP) for onion and non-Basmati rice exports. This breaks export supply chains and affects India's image as a reliable suppliers affecting price realization for Indian produce. The country is seen as a source of high quality agricultural products and 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 keeps 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 imperative to frame a stable and predictable policy with limited State interference to send a positive signal to the international market. It is necessary to refrain from making a distinction between the products meant for export and those for domestic consumption. One way to do this is to decide that export restrictions/bans would be resorted to only in the rarest circumstances. This alone will provide the farmer some confidence to plan for the overseas market. Policy measures should assure farmers to respond to market signals with confidence and redirect resources towards products that will earn higher returns.

The Agri Export Policy thus aims at:

- 1) 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.
- 2) Identification of a few commodities which are essential for food security 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. Also, any kind of export prohibitions and restrictions on the identified commodities above would be taken up in a WTO compatible manner.
- 3). Liberalised import of agricultural products for value addition and re-export.

5.1.B. Reforms in APMC Act and streamlining of mandi fee: Agricultural Produce Marketing Committees (APMC) Acts across States have not been able to achieve the farmers' welfare envisaged in these Acts. Some APMC market yards or mandis which have bred inefficiency and cartelization are a classic case in point. Since decades farmers have been under compulsion to sell their produce in official market yards which may or may not offer the best remunerative prices. Monopoly of the APMC prevents private players from setting up markets and investing in market infrastructure.

The market fee, arthiya commission and other charges left outside the Goods and Services Tax (GST) remain under the purview of the state (and local bodies). Different States continue to charge different fees on mandi procurement (Basmati rice – Punjab

4%, Haryana 4%, Delhi- 1%; Pulses – Maharashtra 1%, UP 2.5%; Soya de-oiled cake - Maharashtra 0.85%, Madhya Pradesh 2.2%).

Some states have adopted the Model APMC act and made amendments to de-notify fruits and vegetables. Establishment of Electronic National Agriculture Market (E-NAM) is a step in the right direction. Quality measurement, infrastructure and dispute settlement mechanism would add more power to E-NAM. The Finance Minister, while presenting the Budget for 2018-19 has made the announcement of 22,000 Gramin Rural Markets which will allow the flexibility to the farmers to sell their produce without being subjected to regulations constraining decision to buy and sell.

The Agriculture Export Policy aims at using the Directorate General of Foreign Trade (DGFT) field offices, Export Promotion Councils, Commodity Boards and Industry Associations to act as advocacy forum for reform by all the states. Efforts will continue with State Governments to remove perishables from their APMC Act. State Governments would also be urged to standardize/ rationalize mandi taxes for largely exported agricultural products. Simplification or uniformity of mandi/agricultural fee across States will create a transparent supply chain that will empower the farmer, provide him wider access to markets and enable free trade across the country.

5.2 Infrastructure and logistics

Presence of robust infrastructure is critical component of a strong agricultural value chain. This involves pre-harvest and post-harvest handling facilities, storage & distribution, processing facilities, roads and world class exit point infrastructure at ports facilitating swift trade. Mega Food Parks, state-of-the-art testing laboratories and Integrated Cold Chains are the fundamentals on which India can increase its agricultural exports. Given the perishable nature and stringent import standards for most of the food products, efficient and time-sensitive handling is extremely vital to agricultural commodities.

A comprehensive need-gap analysis of existing export oriented infrastructure across the value chain will be undertaken. Ports are a vehicle for economic development. Yet, while port development will indeed improve exports it will not provide an exceptional boost to agri trade until supply, quality, handling and hinterland connectivity is enhanced. Identifying strategically important clusters, creating inland transportation links alongside dedicated agri infrastructure at ports with 24x7 customs clearance for perishables will therefore go a long way in boosting trade exponentially. The focus therefore shall be to:

- Identify major ports where current/projected bulk and container agri traffic demands infrastructure and modernization initiatives.
- Sea Port - development of dedicated perishable berths, agricultural jetties;
- Railway -infrastructure at stations to handle agri products, Reefer Wagons;
- Airport -Identify the challenges of operationalizing existing defunct infrastructure at ports such as the Centre for Perishable Cargo (CPC) and requirement of new CPCs, loaders, designated and sufficient quarantine areas, better Hinterland Connectivity.

It is often pointed out that expenses towards logistics handling is about 14 to 15% of the cost of exports. Benchmarked against 8 to 9% in some of the developed economies, the savings on account of improved logistics can make Indian agricultural exports significantly competitive in the global market place. It will be the endeavour of Agriculture Export Policy to compile the logistic bottlenecks confronting different products and work with the newly created Logistic Division in the DoC, different Line Ministries and State Governments for addressing the issues identified and removal of such bottlenecks.

5.3 Holistic approach to boost exports

Agricultural exports are determined by supply side factors, food security, processing facilities, infrastructure bottlenecks and several regulations. This involves multiple ministries including DAC&FW, DAHDF, 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). Over and above this, many of the infrastructure issues handled by State Governments also crucially impinge on agricultural exports.

Agricultural export policy will involve important organizations related to agricultural production to make special efforts towards promotion of export. Krishi Vigyan Kendras will be involved to take export oriented technology to farmers and create awareness among farmers about export prospects.

The stakeholders have often talked of a disjointed, single-minded mandates of respective ministries which restrict their ability to successfully influence domestic agricultural production and global trade. International trade opportunities play significant role in the cropping and farming decisions of domestic farmers; guar, rice, pulses and oilseeds are excellent examples. Equally, the agricultural production situation of the country influence a country's agricultural and food imports and exports. The United States Food and Drug Administration (USFDA) / United States Department of Agriculture (USDA), Federal Service for Veterinary and Phytosanitary Surveillance (FSVPS) and European Food Safety Authority (EFSA) in USA, Russia & EU respectively are often cited as excellent examples of exclusive organizations which are empowered to frame, regulate and implement policies related to both agricultural production and trade. It may be worthwhile to work towards similar agencies in India which cover all aspects of agri-food production and trade in a effective and calibrated manner.

Pesticide and chemical residues are a chief cause of concern for Indian agricultural exports. Indian food exports are sometimes rejected due to residues found that are higher than Maximum Residue Limit (MRL) of importing nations. From Basmati to grapes to peanut - the list is long. Lack of awareness amongst Indian farmers regarding the judicious and timely use of chemicals has been a major impediment. To add to this, farmers may be using many pesticides which are not permitted or are

increasingly being banned in other nations. EU's recent move to drastically reduce the MRL of Tricyclazole from 1 PPM to 0.01 PPM in Basmati rice is a case in point. Considered to be highly cost effective and farmer friendly, Tricyclazole has been in widespread use across India. If Indian rice exporters were to implement a farmer awareness and agri input switch program, it would best be done in conjunction with DACFW and DoC. Furthermore, since agriculture and land are State subjects this would require State Governments to be fully on board. Quality control can best happen at farm level - going forward, it is plain that strategic and operational synergy across ministries will be key to boosting productivity and quality.

Whole of government approach will address issues of (a) R & D for improved varieties, value addition and packaging, (b) Establishment of a good standards regimen, (c) A holistic response to Sanitary and PhytoSanitary (SPS) and Technical Barriers to Trade (TBT) barriers faced by Indian products, (d) Identification of winning sectors and strategies for augmenting exports in those sectors. These issues are elaborated further in the operational part of the strategies.

5.4 Greater involvement of State Governments in Agriculture Exports

Since 1919, when the Montford Reforms declared it a 'Provincial' subject, agriculture in India has enjoyed the distinction of being a State subject and after independence, when the constitution was drafted it became a "State" subject. While the central government may advise and allocate funds, proper implementation of farm and market infrastructure reforms lies at the behest of State Governments.

Each State invariably has its own set of priorities, socio-economic & political realities and agricultural nuances which they strive to align with the nation's overarching goals. Indeed, every State has a different (and often multiple) agro-climatic zone leading to different cropping patterns and they each suffer from vagaries of nature in extremes; one part of India may experience a drought while another may be dealing with floods. Furthermore, "trade and commerce" are in the Union list and States often see no formal role for themselves in the nation's agricultural exports.

Some of the suggestions which have come for facilitating agriculture exports at the State level are as follows:

5.4.A. Identification of a nodal State Department / Agency for promotion of agriculture export: In many States, either the Industry Department, Micro, Small & Medium Enterprises (MSME) Department or Commerce and Industry Department are identified as the nodal department for export promotion and consequently focus is lost with regard to agricultural exports. 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. For example, in Maharashtra, the Maharashtra State Agricultural Marketing Board, in Karnataka, the Karnataka State Agricultural Produce Processing and Export Corporation Limited, in Gujarat, the Gujarat State Agriculture Marketing Board etc. play a pro-active role in facilitating exports and such organizations could be recognized as the nodal body for agriculture export promotion. 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 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, organize reverse buyer-seller meet at the State level by getting buyers from abroad, encouraging State level exporters to participate in the relevant international fairs, etc. They would also work towards creation of dynamic and functional information-sharing mechanism between the State and Centre on SPS and TBT issues. The DoC will play a proactive role in capacity building, supporting and handholding such nodal agency at the State level.

5.4.B. Inclusion of agricultural exports in the State Export Policy: Many State Governments have come up with an export policy and special focus could be made on agri exports. Pushing for policy changes in the APMC Act, bringing out policy for cage culture for inland and 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. could be included as part of the State's Export Policy.

An approach of developing product specific clusters in different agro climatic zones of the country 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, etc. Integration of processors / exporters with farmers will ensure better returns and stable market. The State Governments may identify such clusters which have a high potential of export and work with related agencies for facilitating export from those clusters.

5.4.C. Infrastructure and logistics to facilitate agricultural exports: An assessment of the State's potential in key agricultural sectors and drawing up an action plan to support the infrastructure creation will be crucial to promoting exports. For e.g., in the coastal states, creation of state of the art fish landing centres, high quality fishing harbour, pre-processing facilities etc. are extremely crucial. Similarly, creating a series of cold chain facilities for perishables, creating vapour heat treatment and irradiation facilities to enable export to specific markets etc. are some of the interventions which need to be initiated by the State Governments. Issues wr.t. Logistics need urgent attention e.g. many air cargo companies are yet to achieve their fullest potential due to non-availability of landing schedules in most of the leading Indian airports which handle air cargo. Similarly lowering landing fee / parking fee & less duty on ATF Fuel would make it cost affective for export of fresh / highly perishable / processed agricultural products. A concerted effort needs to be taken up by respective State Governments to identify the infrastructure bottlenecks, issues relating to logistics and then identify sectors which are amenable to private investment/FDI and sectors where Government has to invest. ICD/CFS with good revenue models could be thought of in the private sector whereas cold chain logistics, warehouse, rail and road infrastructure, etc. would require public funding. A clear action plan on the infrastructure gap would enable State and Central Government to identify resources for such infrastructure.

The Government has made an effort to supply uninterrupted, quality and affordable power to the agriculture sector. Various measures viz. Agriculture Demand Side Management Scheme (AgDSM), Deendayal Upadhyaya Gram Jyoti Yojana, Power for All and Cold Storage Industries, KUSUM Harnessing Solar Power for Rural India Scheme have helped improve the situation. The favourable power situation in the country could be utilized for supporting the infrastructure required to facilitate agricultural exports.

5.4.D. Institutional Mechanism at Union level, State level and cluster level to support exports: The agriculture export policy will examine the models by different States and suggest some of the best practices in coordinating between different Departments concerned with export of agricultural products. Departments like Agriculture, Horticulture, Fisheries, Food Processing, and Commerce & Industry etc. look after the production and post-handling issues relating to agriculture, horticulture, aquaculture, tea, coffee, spices and value addition of these products at the State level. In some States, committees chaired either by the Chief Secretary or Agriculture Production Commissioner has been doing an effective job in coordinating with different Departments and with DGFT, Customs, and autonomous bodies under Department of Commerce for facilitating export promotion measures.

The State level export monitoring committee chaired by the Chief Secretary and supported by the Regional Authorities of DGFT, autonomous bodies under Department of Commerce - Agricultural and Processed Food Products Export Development Authority (APEDA), Marine Products Exports Development Authority (MPEDA), Export Inspection Council (EIC), Spices Board, Coffee Board, Tea Board, Rubber Board, Tobacco Board, different Export Promotion Councils (EPC), Customs, Plant / animal Quarantine could provide the institutional mechanism for this purpose at the State level.

Similarly, an institutional mechanism at the Central Government level is envisaged to monitor the progress made in implementation of the Agriculture Export Policy. A committee headed by Commerce Secretary and with participation of Secretaries of DAC&FW, DAHDF, DARE / ICAR, DoCA, DFPD, MoFPI, FSSAI, DGFT, Customs and representatives of concerned State Governments to meet on a quarterly basis would facilitate convergence of efforts /schemes, suggest actions to be taken for achieving the objectives of policy. A monitoring cell is to be established in DoC to follow up on deliverables by all the concerned Departments, Organisations and State Government. Actionable steps with proper identification of roles and responsibility would be set by the monitoring cell.

For monitoring the cluster development work, a cluster facilitation framework to be led by the Cluster facilitation cell under Nodal Collector / Director (Agriculture) / (Horticulture) / (Fisheries) is also proposed. The exporters, potential exporters, farmers' producers companies, producers' cooperative, Panchayat / DAY-NRLM etc. are important stakeholders in the cluster level committee. Quarterly meeting at the level of Nodal Collector / Director by involving the above mentioned stakeholders and the relevant Departments would enable the clusters to increase productivity, increase area under cultivation of the exportable item and improve quality of produce. The

linking of farmers' producers' organizations, farmers' cooperatives to the export value chain will be initiated through creation of infrastructure, facilitating primary and secondary processing in the clusters and also by linking them to the exporters.

In addition, the following interventions are also taken up at the State level in some States.

(a) Encourage the industry bodies/associations to play a more pro-active role

The various bodies representing different food processing sectors need to be more pro-active in giving suggestions on accessing new markets and consolidating in existing markets.

(b) Greater involvement of industry in R&D

There is a need to ensure greater interaction between the various research organizations and industry bodies which will enable the research bodies to work on industry specific requirements.

6. Operational Recommendations

6.1 Focus on Clusters

While presenting the budget for 2018-19, the Finance Minister 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.

There is a need to evolve and put in place institutional mechanism for effective involvement and engagement of small and medium farmers for entire value chain as group enterprise(s) within cluster of villages at the block level for select produce(s). This will help to realize actual benefit and empowerment of farming community to double their income through entire value chain.

Exporting horticultural 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. The success of such a scheme will depend on State Government infrastructure. It is therefore critical that the Government of India encourage and incentivize the State Governments by strengthening State infrastructure to:

- Identify suitable production clusters
- Conduct farmer registrations
- Digitization of land records
- Promote Farmer Producer Organizations (FPO)

Domestic factors play vital role in export which include technology, trade facilitation, infrastructure, logistics, regulation, institutions, competitive markets and participation of private trade in all stages of supply chain including pre-harvest. It is recommended that this scheme should involve active partnership with private exporters who will have a natural incentive to promote such clusters. It is expected that greater involvement of private sector in agriculture exports would bring focus, better coordination and export oriented production.

Farm Producer Organizations are an institutional innovation to help small holders overcome scale disadvantages and extend their reach to modern technology and distant markets. New AEP will address policy obstacles faced by FPOs and work through NABARD, SFAC and State level organizations to expand FPO network.

Subject to successful implementation of these clusters, a transition to Agri Export Zones (AEZs) could be thought of to facilitate value addition, common facility creation and higher exports from such zones. The measures towards setting up and functioning of the AEZs would be taken up in WTO compatible manner. Special Economic Zones (SEZ) facilitate production of goods at a comparatively lower price for exporters aiming to be globally competitive. India has many successful SEZs established in Public and Private sectors in specific sectors like IT, Textiles, Pharmaceutical and some being multi sectoral. There are opportunities for developing Agriculture Export SEZ mainly aimed at producing value added agriculture commodities for certain countries which are largely dependent on import of agriculture products. The interest of some countries (having substantial gap in domestic availability of grains, vegetables and fruits) can be explored for bringing in Foreign Direct Investment (FDI) into Agriculture Export SEZ in order to ensure food security of that country. There can be complete buyback arrangements by the countries which are bringing in FDI thus providing a stable market for Indian exports.

Stakeholders have recommended for creation of a corpus for export oriented production through development of clusters. This will be the key to boosting volumes of standardized, good quality exports.

As part of the Agriculture Export Policy, following unique product-district clusters have been identified for export promotion. A Product / cluster is 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.

Product	Region	State	District
Banana	South	Kerala	Thrissur, Wayanad, Thiruvananthapuram
		Andhra Pradesh	Kadapa, Anantapur
		Tamil Nadu	Trichy, Theni, Pollachi

Product	Region	State	District
	West	Maharashtra	Jalgaon, Kolhapur, Solapur
		Gujarat	Bharuch, Narmada, Surat
Pomegranate	South	Andhra Pradesh	Anantapur, Kurnool
		Karnataka	Belgaum, Mysore
	West	Maharashtra	Solapur, Ahmednagar, Pune
	Central	Madhya Pradesh	Khargone, Khandwa, Burhanpur
Mango	West	Maharashtra	Ratnagiri, Sindhudurg
		Gujarat	Junagarh, Valsad, Kutch, Navsari
	North	Uttar Pradesh	Saharanpur, Meerut, Lucknow
	South	Telangana	Rangareddy, Mehboobnagar, Warangal
Andhra Pradesh		Krishna, Chittoor, Kurnool	
Grapes	West	Maharashtra	Pune, Nasik, Sangli
Rose Onion	South	Karnataka	Bangalore Rural, Chikkaballapura
Onion	West	Maharashtra	Nasik
	Central	Madhya Pradesh	Indore, Sagar, Damoh
Potato	North	Uttar Pradesh	Agra, Farukkabad
		Punjab	Jalandhar, Hoshiarpur, Kapurthala, Navashehar
	West	Gujarat	Banaskantha, SabarKantha
	Central	Madhya Pradesh	Indore, Gwalior
Tea	East	Assam	Tinsukia, Sibsagar, Dibrugarh
Coffee	South	Karnataka	Chikkamagaluru, Kodagu, Hassan
Marine products	South	Andhra Pradesh	East Godavari, Vishakapatnam, West Godavari, Nellore
	East	Odisha	Jagatsinghpur, Bhadrak, Balasore
	West	Gujarat	Kutch, Veraval, Navasari, Valsad
Chilli	South	Telangana	Khammam, Warangal
		Andhra Pradesh	Guntur
Turmeric	South	Telangana	Nizamabad, Karimnagar
		Kerala	Wayanad, Alleppy
	East East	Meghalaya	West Jaintia Hills
		Odisha	Kandhamal
Cumin	West	Gujarat	Banaskantha, Mehsana
	North	Rajasthan	Jalore, Jodhpur, Barmer, Nagaur, Pali
Pepper	South	Kerala	Wayanad
	South	Karnataka	Chikmagalur
Cardamom	South	Kerala	Idukki
Isabgol	North	Rajasthan	Jodhpur, Nagaur, Barmer, Jaisalmer

Product	Region	State	District
Castor	West	Gujarat	Banaskantha, Kutch, Patan, Sabarkantha, Mehsana
Orange	West	Maharashtra	Nagpur, Amravati, Wardha

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 organisation and third party certification. The implementation would require full involvement of State agriculture / horticulture / fisheries Department, 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 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, use of mobile app for pest management, use of Artificial Intelligence, use of drones for monitoring and adoption of newer technologies in the field like laser land levelers, propelled sprayers, precision seeders and planters, transplanters for seedlings, multi-threshers etc. Renewed focus is required on seeds, pesticides, fertilizers and proper utilization of water which can double the area under irrigation.

6.2 Promoting value added exports

6.2.A. Product development for indigenous commodities and value addition:

It is proposed that the agriculture export policy must focus on promotion of value added, indigenous and tribal products. As highlighted in the previous sections, India's export basket is dominated by products with little or no processing or value addition.

Stakeholders have recommended for financial support for commodities identified in the indigenous category which include non-forest produce, wild herbs, medicinal plants, extracts, lac, essential oils etc. This would require intense export focused research for developing exportable products along with strong branding efforts.

Stakeholders have suggested a financial package for development and research on value added products. 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). Industry estimates suggest a significant quantity of exports head to countries which conduct limited value addition and re-export it.

A preliminary exercise on a few processed food products revealed the following:

PRODUCT	Present level of exports	Projected exports in the next 3 years	Potential markets
Biscuits & Confectionery	\$ 185 mn	\$ 350 mn	Angola, USA, Haiti, Namibia, Uganda, UAE, Nigeria, Kenya
Indian Ethnic Foods	\$ 114 mn	\$ 200 mn	USA, Australia, Canada, UAE, Nepal
Cereal Preparations	\$ 471 mn	\$ 800 mn	USA, Bangladesh, UK, Nepal, UAE, Angola
Dehydrated onion, other vegetables & Frozen vegetables including Gherkin	\$ 207 mn	\$ 400 mn	USA, Germany, Belgium, Russia, France
Processed fruits- juices, concentrates	\$ 338 mn	\$ 600 mn	Saudi Arabia, Netherlands, Yemen, UK, USA, Algeria, Kenya

6.2.B. Promote value added organic exports: Currently, 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. Under the aegis of the National Programme on Organic Production (NPOP), new categories of products such as livestock, aqua-culture having good potential for exports have been included. This is likely to give a boost to the value added organic exports. In addition, standards on organic textile could also be included for looking at augmenting the value added textiles to be exported from India.

Currently, 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 (mango pulp, puree, by-products of oil crops, soya meal, cakes and few ready to eat products) and single processed products such as sugar, tea, edible oils, coffee and essential oils are exported from India. India 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, textile products, etc. Some of the ideas shared by stakeholders for promotion of value added organic exports is as follows:

❖ **Marketing and branding of organic products**

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, support for buying shelf space in the organic retail chains etc. have been floated by the exporters.

APEDA as the nodal organization for implementation of NPOP will take up the required coordination for enhancing organic exports from India.

❖ **Develop uniform quality and packaging standards for organic and ethnic products**

There is increasing demand for value added, ready-to-eat and ethnic food from developed nations, 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. India can offer a one stop solution and provide a range of ethnic products ranging from healthy and organic to processed and convenient food. This is an excellent opportunity for entrepreneurs to leverage our traditional food heritage and invest in innovation in taste, packaging, fusion food and shelf life of food.

India's 5000 year old traditional Ayurvedic food system can play the role of a potential game changer. The world-renowned wound healing properties of turmeric, stemmed from traditional Indian knowledge. Much like the export of Yoga, it is this traditional knowledge that must be communicated to the world and marketing of products would inevitably follow. Use of Indian Ayurveda products, spices for ever-growing nutraceutical market is a promising prospective.

- Pickling is the art of preservation that Indians mastered long before modern R&D efforts to increase shelf life of food products.
- Ready to cook/Ready to eat food with numerous variants of lentils, rice (poha), biryani, chicken tikka masala, kebabs, samosas and parathas are popular across the world.
- Namkeens/Snacks such as Murukku and Dal Mot are an excellent source of protein which could replace fat rich snacks in the West.
- MARKFED has been successful in exporting large volumes of branded, canned Indian cuisine like sarson da saag in countries such as US, UAE and Canada. Similarly, popular cuisine in different regions could be marketed in large volumes in overseas countries.

However, standardization of physical and quality parameters has been ignored to some extent in the largely unorganized, ethnic food industry. Apart from branding campaigns, promoting ethnic cuisine requires standardization and development of packaging and quality protocols. Paneer and Rasgulla exports, for example, suffer from low shelf life, arduous sampling and excessive lead time which must be urgently reduced by developing relevant protocols.

❖ **Organic products in North East**

Although quality organic products are available in North-eastern regions, export of these products is not happening. In order to initiate exports, development of 'AMUL' – style cooperatives especially in the Eastern and North-Eastern Regions is required. It would bring in discipline in procurement and well-oiled distribution network for the products from the region. Such co-operatives can undertake grading / sorting / testing

of products which can be further sold or processed.

6.2. C. Promotion of R&D activities for new product Development for the upcoming markets: Fortification of food products is important in view of malnourishment in children and ailments due to deficiency of key vitamins/minerals in the diet. Also, there is increased interest in development of fortified food items for health benefits (gluten free, super grains, starch free etc). The demand for new super food including a lot of coarse cereals has been growing in the western countries. Given the small but robust production of coarse cereals in tribal pockets and rain scarce regions of India, there is a significant potential for augmenting exports from India. FSSAI would be urged to notify standards with regard to fortified products for domestic market which would result in higher exports.

6.2. D. Skill development: As mentioned earlier, India has been supplying commodities to markets in the global value chain which further do value addition and realise higher returns on the product. India is a major supplier of frozen shrimp to Vietnam. With the skilled manpower available in Vietnam, significant value addition is made and re-exported to destination markets. India having advanced processing plants, superior quality system is unable to make much progress in export of value added products. Lack of skill development facilities / curriculum is said to be one of the lacunae in the system.

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. With Government of India's focus on skill development with establishment of a separate Ministry, skill development takes center stage.

6.3 Marketing and promotion of "Brand India"

The stakeholders have suggested constituting separate funds dedicated to marketing of organic, value added, ethnic, GI, Region specific and branded products. It is also recommended that marketing campaigns be created for individual fruits or products such as "Wonderful Pom" and "Bananas of India". This fund would primarily be utilized 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.

Government must continue its concerted efforts for targeted GI registration, stakeholder negotiation and preservation of GI tag. Marketing of our best products as "Make of India", by stepping up of advertising and investing in GI of our unique products would sharply increase our exports. Exporters are to be encouraged to do product registration in target markets.

Region specific agriculture / processed products are popular with Indian diaspora and if given promotion also find place in the palette of importing country citizens also. For e.g. Makhana from Bihar, Agra petha, Hyderabad biryani are popular and have distinct identity. Value added products like Indian ethnic meals with 2-3 days shelf life can be produced and air freighted daily to GCC & ASEAN Supermarkets.

Department of Commerce will work with the stakeholders for preparation of an estimate and take up with relevant ministries for implementation of such a marketing campaign.

It would be worthwhile to do benchmarking of agriculture export promotion activities with peer-group countries and best countries in the world. One of the examples often cited by stakeholder is the experiment carried out in Malaysia. Malaysia has introduced a commodity branding programme called "Malaysia's Best". This is an umbrella brand for the country's horticultural products that guarantees quality and safety in accordance with Malaysian Standards and the Malaysian Good Agricultural Practice System. It was initiated for carambola, papaya, pineapple, mango and watermelon, but is to be extended to all other commodities. In Malaysia all farmers can apply to be certified although, initially, most certified farmers are contracted to the Federal Agricultural Marketing Authority (FAMA) for delivery to supermarkets. Similar campaign for Indian bananas, mangoes, pineapple, pomegranate, litchi, Indian tea and coffee, Indian spices could be initiated with joint efforts of exporters, autonomous bodies and IBEF.

India produces a variety of Agriculture produces in different parts of the country. Due to its fragmented nature of production, aggregating farm production to fulfil large orders becomes a difficulty even with big sized export companies. There is no information mechanism to ascertain the current stock available with different sources in different States. Currently the Indian agencies are performing specific tasks towards the export development. However, specialized Field level marketing with order closure is not being taken up by any Agency.

In order to provide a platform for SHGs/FPOs/Cooperatives/Artisan groups, Agriculture export policy proposes to establish a mechanism for linking all credible SHGs, FPO's, Cooperatives, Quality certified Private Processors and Traders etc. through a public private partnership mechanism including exploring the possibility of Development of a portal. The effort may involve providing e-commerce platform for direct linkage of Farmers' cooperatives, producer societies, etc. for export linkage.

6.4 Attract private investments in export oriented activities and infrastructure.

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. Some of the benefits are as follows:

- **Better quality compliance:** Post Harvest processing of agri-produce, such as waxing of fruits, irradiation treatment of meat, sorting of bad/damaged fruits/produce, will increase shelf life of the produce and will be helpful in maintaining quality of the produce for distant markets.
- **Facilitates smooth logistic handling:** Will assure better handling of produce, result in decreasing wastage, increase marketable surplus quantity. This will also

generate better price realization (both value & volume advantages), will increase volume handling capabilities, thereby offering 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.

- **Expansion to distant markets:** Smoother logistics, better quality & volume handling capabilities will offer opportunities to expand to distant markets, improve the shelf life/keeping quality of the produce and offer higher opportunity to cover farther export destinations.

The Infrastructure proposed to support agriculture exports from the Focus States includes:

Packhouse:

- Will help increase marketable surplus by assuring quality through grading & primary processing of produce.
- Will provide the ability to cater to large volumes of produce for exports in shorter post- harvest windows.

Processing infrastructure:

- Value addition to raw produce will help ensure consistent quality, longer shelf life, and better price realization.
- Will also provide the ability to expand to newer markets and capture new consumer segments in current markets, thereby increasing export sales.

Cold storage:

- Low temperatures decrease microbial & enzymatic activity, it will increase the shelf life of produce by providing a constant low temperature environment and will increase marketable surplus for exports.
- Will also provide ability to capture off-season/complimentary-season markets.

Exit Point Infrastructure:

- Facilitates maintenance of uninterrupted ambient temperature chain (cool chain/cold chain) at the maximum distance possible.
- Provision of Perishable Cargo center, Cargo Freight Stations for container stuffing, Reefer Containers, reefer plugs, scanners, facility to hold containers in vicinity of the port area etc. ensure this from exit points to consumer gate.

Air cargo:

- Highly valued agriculture products, Fresh and perishables are shipped by Air cargo. Infrastructure such as Centre for Perishable Cargo, loaders, vacuum cooling facility, work floors, moving truck docs, designated and sufficient Perishables' / Animal handling / quarantine areas, Pallet container handling system, Automatic storage retrieval system at International & Domestic Airports would increase efficiency / cost effectiveness of export through air cargo.
- Possibility of developing new Greenfield Airports for cargo purposes may offload the traffic from airports at Mumbai, Delhi etc.

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.

The autonomous bodies and export promotion councils under the Ministry of Commerce will work with line ministries, State governments and exporters for identification and bridging of some of the missing gaps pertaining to infrastructure facilitating agricultural exports. Indian missions abroad should be equipped and actively involved in providing information on export prospects in various countries and facilitating the exports.

6.4. A. Ease of Doing Business (EODB)& Digitization:

- Farm level – digitization of farmer land records

Digitization of land records, geo-mapping of lands, registration of farmers and farm producer organizations (FPOs) is critical to implementation of a smooth agricultural export policy. The Central Government has been working with the States to conduct widespread campaigns to formalize tenancy, register land records and carry out satellite mapping of lands while linking these details to farmer AADHAR cards. This will be critical in establishing traceability, market linkages and plugging leakages in public funds. Successful implementation of such digitization will facilitate consolidation and aggregation of land holding for export oriented cultivation.

- Market Intelligence cell at DoC and Portal for Information Dissemination

There has been a consistent demand from exporters across sectors for a dedicated platform to access trade and market related information. Recently, the DoC has created a portal on Trade Analytics which provides the trends for different commodities in different markets. Similarly, APEDA and MPEDA run 'agri exchange portal' and 'fish exchange portal' respectively to provide market intelligence to their stakeholders. 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 pages. Efforts will be initiated 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.

There is a need to develop Manual of Importing Country Requirements (MICOR) for all the major agriculture products exports from India for all major importing countries. The exporters would be able to look up for requirements of importing country and comply, minimizing the risk of rejection of exported consignments. APEDA, EIC, MPEDA, commodity Boards and the Councils would develop, host and update the

MICOR. Regular workshops with exporters are also envisaged.

- Trade procedures and facilitation

Exporters reveal that lengthy and cumbersome documentation and operational procedures at ports are a constant challenge (refer table below). They have often recommended to implement 24 x 7 single window clearance of perishables imports and exports at key ports across the nation. It is equally important to station more quarantine officers at strategically important ports.

Economy	Ease of doing business rank	Trading Across Borders								
		Rank	Border compliance		Documentary compliance		Border compliance		Documentary compliance	
			Time to export: (hours)	Cost to export: (USD)	Time to export: (hours)	Cost to export: (USD)	Time to import: (hours)	Cost to import: (USD)	Time to import: (hours)	Cost to import: (USD)
Bangladesh	174	172	100	408	147	225	183	1294	144	370
China	84	96	26	522	21	85	92	777	66	171
Denmark	3	1	0	0	1	0	0	0	1	0
India	130	133	109	413	41	102	287	574	63	145
Malaysia	18	49	20	321	10	45	24	321	10	60
Singapore	1	41	12	335	4	37	35	220	1	37
Sri Lanka	107	90	43	366	76	58	72	300	58	283
Vietnam	90	99	57	309	83	139	64	268	106	183

- Grievance 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. The Trade Disputes Cell in the DGFT would be reoriented to function as a responsive grievance cell for exporters and importers.

6.4. B. Developing Sea Protocol: 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. Time is a major constraint and air freight proves costly for exporters while low volumes and poor infrastructure make it unviable for airlines to transport produce. However, India's export of fresh produce can grow exponentially if sea protocols are established across exported/exportable varieties of shortlisted commodities. A sea protocol will indicate at what maturity level harvesting can be done for transportation by sea. This exercise, has to be carried out in partnership with shipping lines, reefer service providers, ICAR and APEDA. Philippines and Ecuador are a classic case in point – both countries were successful in developing sea protocols for exporting bananas for 40 and 24 days of sea journey respectively. Philippines has been shipping Bananas to the Middle East which takes around 18 days while India has only been able to ship this produce with only 2-4 days transit period. Trials of sea protocol held at strategically important ports across India are therefore an immediate requirement that must be taken up on war-footing. This will go a long way in promoting trade.

6.5 Establishment of Strong Quality Regimen

The role of FSSAI, EIC, plant and animal quarantine and different Commodity Boards in setting standards, enforcing such standards and a robust accreditation and certification arrangement to identify export worthy establishments will be facilitating further exports.

The facilitation in terms of a 'Whole Government Approach' in tackling SPS and TBT barriers of other countries will also quicken the pace of market access as well as to look at measures with regard to countries which are putting up unreasonable barriers.

As part of India's effort towards establishing a strong quality regime, the focus will be on strong R&D, new varieties, state of the art lab and a lab networking process for effective accreditation and monitoring.

6.5. A. Establish and maintain single supply chain and standards for domestic and export market:

Maintaining consistency in quantity and quality is important for getting export orders on a sustainable basis. There has to be a convergence of policy related to quality standards set for domestic market and those set for the export market. This is particularly challenging for unorganized and fragmented sectors such as fruits & vegetables, livestock and dairy where traceability continues to elude. As a result, India's agricultural produce often tends to fall short of standards laid by importing nations. Limited control over farm practices and domestic marketing also allows vested and competing interests to spread fears and stifle trade. The FSSAI is responsible for setting standards for food manufactured in the domestic market as well as food products imported in to the country. However, export standards are laid down by various bodies under DoC which are a result of norms stipulated by importing nations. High quality Mangoes, bananas and cashew are exported while lower standard and substandard produce finds its way to the domestic market across the country. Harmonizing of domestic standards would result in overall improvement of quality of produce, awareness regarding good agricultural practice and lower the transaction cost for exports.

6.5. B. SPS and TBT Response Mechanism:

a) It is common knowledge that issues relating to market access go on for months, sometimes years together before countries allow market access for products. 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 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.

b) Apart from response to rapid alerts, the market access efforts require submission of pest risk analysis, dossier on animal health and disease control programme, 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.

c) The residue levels in the food products, the testing protocol by the laboratories and the tolerance levels followed by importing countries is an issue on which convergence of efforts are required. Instead of multiple agencies extending accreditation to laboratories, an extensive mapping of competencies of labs along with their ability to carry out tests in accordance with tolerance limits set by importing countries would obviate the need for multiple accreditations. As part of the Agriculture Export Policy, the Department of Commerce proposes to have a single portal which will provide the facility for single accreditation of labs and prevent different organizations from carrying out accreditation activities separately. NABL will be the lead organization for joint assessment and accreditation. This will also facilitate a root cause analysis in case of default and penalize the defaulting laboratories in case of irresponsible sampling or testing mechanism for exported products.

Similarly, drawing up residue monitoring plans (RMP) would help in a) creating online platform for maintaining traceability, b) facilitating exports by standardizing testing protocols. APEDA has already initiated this for grapes. As part of the Agri Export Policy a similar initiative by Export Inspection Council is proposed for the shrimps being exported from the country. Efforts will be to continue traceability initiatives and bring more and more agricultural products under its ambit. A template / framework for capturing the details required in a traceability system through the participation of farmers' would be developed which could be implemented with the help of State Governments.

d) Depending on the pesticides which are banned/prohibited by the importing countries, sometimes a policy measure could be required in India, especially if, alternative pesticides are available. Registration of new pesticides by Central Insecticide Board (CIB), following the recommendation of their scientific panel may take months and consequently force prevalence of pesticides which have been banned/ found obsolete in importing countries. Sometimes, pesticides which are not registered in importing countries (e.g. tricyclazole in EU) require exhaustive scientific documents to be submitted for which CIB needs to play a proactive role.

e) Further, in case of export rejections of agri and food products, there is a need for doing a root cause analysis and identifying the reasons for such rejection. The USFDA and European Union have developed a system of reflecting import rejections in their web portal. 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.

Thus, in view of the above, 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. The mandate of the above institutional mechanism will look at the following areas:

- (i) Issues pertaining to market access, viz. Pest risk analysis, risk assessment of food products, submission of documents relating to animal disease control programs, etc. efforts for accessing new markets and steps taken by respective agencies.
- (ii) NTBs faced by Indian agricultural, marine and processed products (including Tea, Coffee, Spices) and strategies for overcoming the NTBs. The NPPO, EIC, other Export promotion bodies like APEDA, MPEDA need to bring out the requirements and progress made between meetings.
- (iii) The status of our strength/ability for pre-export monitoring and quality testing for different products, identifying gaps and roadmap for bringing our laboratory and other pre-export infrastructure at par with international best practices.
- (iv) Initiatives for online transactions, ensuring that systems developed by different agencies, viz. ICEGATE of Customs, DGFT's software, Export Development Authorities' software talk to each other and reduce paper work for the exporters, as part of ease of doing business.
- (v) Addressing concerns of exporters relating to national standards, harmonising it with Codex or other international standards, import clearance of ingredients by FSSAI, risk based inspection/client accreditation system for quicker export/import clearance could also be discussed in this platform.

6.5. C Conformity Assessment: Many importing countries do not recognize India's export inspection and control processes. The lack of recognition of Indian testing procedures and conformity standards proves costly to exporters and therefore farmers. Many times this means multiplicity and duplication of tests by various laboratories across the country. Spices, organic food, Basmati products have been most affected by this. Equally, the government must make concerted efforts during bilateral discussions for mutual recognition of ethnic and organic products and standards. EIC, APEDA, MPEDA, Spice Board, etc. will continue to strive for conformity assessment procedure to be recognized for smooth export of agriculture exports.

6.6 Research and Development

Stakeholders have often recommended the need to identify and utilize resources for export-oriented product development and quality testing of identified commodities. There is also a need for importing improved germplasm in some varieties of agricultural products. Suggestions on interventions required in R & D sector would be sought from stakeholders to ascertain the financial implications.

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. Decades ago, Indian agricultural R&D witnessed breakthroughs with the

green and white revolution. Since then, cereals have enjoyed higher allocation - in the field and in the laboratory - as compared to horticultural crops. On the export front, PUSA Basmati 1121 is perhaps a good example of successful domestic research by Indian Agricultural Research Institute (IARI) to have brought in accolade and foreign exchange; the Basmati export industry quadrupled from being a less than US\$ 1 Billion industry to US\$ 4 Billion after its introduction.

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 Department of Commerce, including Indian Institute of Packaging will work with the stakeholders, MoFPI, ICAR, Council of Scientific & Industrial Research (CSIR) and State Governments in this direction. An efficient institutional framework is needed for technology transfer and extension services for dissemination of information regarding export-oriented production.

- **Importing export oriented germplasm**

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 purported lack of adequate regulation and protection of Intellectual Property (IP) Rights. It has been proposed that the Central Government constitute a corpus which will act as matching fund for importing germplasm and seed varieties of identified exportable focus crops from breeders across the world. ICAR, APEDA, Spices Board, MPEDA etc. and private industry must be the key stakeholders. For each focus crop/product, livestock and aquaculture germplasm negotiations must be carried out with leading exporters to frame a mechanism for providing grants matching private contribution toward varietal import. It will be equally important for the government to ensure better enforcement of IP Rights to encourage private participation.

- Exporters suggest there is a need to import patented coloured/self-thinning grape varieties which are in demand in international markets.
- Newly successful Indian grape varieties such as Nana purple, Krishna seedless (black seedless) and super sonaka, Manikchaman, SS, RK (white seedless varieties), which are popular in the middle east need to be formally recognized, registered with establishment of post-harvest protocols.
- Potato seed to be improved for better quality & longevity (e.g. Holland origin)
- Import less pungent varieties of garlic and white onions for exporting to EU
- Internationally accepted pomegranate varieties of 500 gram size must be imported as against the average 300 gram sized fruit grown in India

- **Testing labs with strong infra in NE region to support export of organic produce**

With single-minded export cluster focus, North East region has the potential to produce exportable organic produce. Spices exporters have particularly shown interest in the organic/non-organic high quality turmeric, ginger and pepper grown in the region. This would require setting up state-of-the-art testing and certification laboratories for the products to be exported/imported. Currently, the produce is sent to Kolkata for testing which is logistically challenging and proves costly. It has been

proposed by stakeholders that an NABL accredited laboratory be set up in Guwahati, particularly for the testing of spices. The aforementioned recommendation to upgrade storage and handling infrastructure at Guwahati airport will be complementary to this measure.

Furthermore, the feasibility of setting up plant quarantine and testing laboratories at Akahura in Agartala, Sutarkandi in Karimganj, Dawki in Meghalaya, Moreh in Manipur and Zokhawthar in Mizoram must be carried out. This would help promote and regulate informal trade at these stations via Myanmar en route to South East Asian nations.

6.7 Miscellaneous

6.7. A - Creation of Agri-start-up fund: Entrepreneurs are to be supported to start a new venture in Agri products exports during their initial period of establishment. A start-up in the Agri export sector, which is going to work on a new concept / product / project may submit its proposals. All such proposals 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.

Conclusion

The Policy aims at addressing a whole range of issues which could potentially propel India into the top bracket of agricultural exports. It has often been recognized that integration in the global value chain is one of the most certain methods of adopting the best agricultural practices along with attaining productivity gains and cost competitiveness. The objective of doubling the farmer's income will invariably require high levels of income as well as improving in the food value chain.
