Working Paper 559

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DOING BUSINESS, TRADE FACILITATION AND AGRICULTURAL EXPORTS IN INDIA - THE CASE OF SELECT AGRICULTURAL PRODUCTS

Malini L Tantri*

Abstract

This paper, within the framework of the transaction costs approach, attempts to examine the issues of doing business and trade facilitation in the context of select agricultural exports. The analysis, based on interaction with key stakeholders, helps us to argue that issues faced by exporters vary across select agricultural products in different Indian states. Given the perishable nature of goods, the corresponding loss faced by exporters is substantial and irreplaceable. Besides this, there are numerous challenges/issues flagged by stakeholders, which need policy attention to further fine-tune the Agricultural Export Policy.

Background

The increasing demand for high-quality food products, particularly in developing countries due to the rising incomes of the middle class and their demand for a nutritionally-diverse diet has given farmers better opportunities and incomes through participating in the value chains for such products, usually through contract farming for large suppliers. Especially. when it comes to imported products, consumers are becoming more aware and wish to be informed of where their food is coming from, and whether it is under safe and healthy conditions with minimal use of agricultural fertilizers and reduced greenhouse gas emissions (Asian Development Bank, 2012).

In this context, even if an internal system is put in place for facilitating AVC, the next challenge agricultural exporters face is related to what kind of certificate and documentation is required, the corresponding time and costs required to obtain the same, as any information asymmetry results in border rejection of agricultural exports (Kumar, 2016; Mukherjee *et al*, 2019). Besides this, agricultural exports being perishable have to face high transaction costs for every additional day spent in obtaining the required documentation. The details about such procedures are studied under the label of doing business and trade facilitation.

The WTO while recognising the importance of trade facilitation and doing business put in place a special Trade Facilitation Agreement. Though there are enormous studies that have attempted to understand the doing business and trade facilitation issues faced by the export of trade in commodities and services (Shepherd and Wilson, 2009; Ramasamy, 2010; Portugal-Perez and Wilson, 2010; Wongpit, 2013), not much has been done in the context of agricultural products (Weerahewa, 2009). This is specifically so in the Indian context (Sengupta and Bhagabati, 2003; Chaturvedi, 2009; De, 2013). Against this background, this paper, within the framework of the transaction costs approach, has attempted to examine the issues of doing business and trade facilitation in the context of select agricultural exports. The rest of the paper is organised as follows: The next section elaborates on the concept and framework of doing business, Trade Facilitation in the context of agricultural exports. The

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Third section elaborates on doing business regarding select agricultural exports in India. The last section summarises the paper.

Doing Business, Trade Facilitation and Agricultural Exports: Approach, Framework and Selection of Product

The World Bank measures a country's ability to do business through a range of indicators including starting a business, getting permits, credit and trading across borders, though these indicators are more directed towards the manufacturing sector. When it comes to agriculture, the World Bank has a separate set of measurements that promote good practices by farmers under 'Enabling the Business of Agriculture', whereby the World Bank scores countries out of 100. India's overall EBA score was 62.23 in 2018, placing it at 54th out of 101 countries that were studied. This is a slight reduction from India's previous score of 62.83 in 2016, due to India's score having reduced in supplying seed, registering fertiliser and registering machinery indicators.

Close neighbours such as China have had better overall scores of 70.53 and 70.29, placing them at 38th out of all countries surveyed. A study of individual indicator scores shows that while China outperforms India in terms of supplying water, sustaining livestock, registering machinery and registering fertiliser, India is better when it comes to supplying seeds, trading food produce and making finance accessible. The indicator that should be given attention to in the context of this chapter is trading food, which measures the laws and regulations that help domestic farmers trade agricultural products to markets (World Bank, 2019) in terms of the time and cost to obtain agriculture-specific documents for product shipment and procedures to obtain licenses, membership and phytosanitary certificates. India had a score of 74.58 out of 100, placing it 46th out of the 101 countries surveyed. The survey found that it took approximately 48 hours or two days to obtain important documents and cost approximately 28 dollars (more than Rs. 2,000) to obtain the same. To compare with neighbours like China, it takes 108 hours to obtain the same documents but the costs are almost nil in comparison. Another indicator where India performs well is in terms of accessing finance, which measures the use of warehousing receipts, which are an effective tool for farmers who do not have collateral to access credit and inclusive finance in terms of whether there is gender discrimination in terms of accessing finance. However, it was also found that India increased tractor registration fees between 2016 and 2019.

Trade Facilitation and its Measures

Trade facilitation refers to government measures that improve the efficiency and transparency of procedures required to clear goods across national borders (Durkin, 2017). It means simplifying technical and legal procedures for products to be traded internationally and includes the electronic exchange of data regarding shipment, harmonising the number of trade documents required for export, as well as possibly appealing the decisions made by border agencies (OECD). It can also include domestic regulations and standards that traders must follow before trading their products, port infrastructure, the logistics involved in conveying and storing goods from origin to destination as well as the procedures that have to be followed in the importing country (GoI, 2018). However, though exporting high-value food products may be more valuable than other commodities, food products are

highly perishable and require proper storage facilities if they have to survive long trips across the world (Durkin, 2017). Export delays of agro products can reduce a country's relative exports of these products by as much as 7 per cent. (UNESCAP).

The WTO recognised the importance of trade facilitation measures, and as a result, introduced the Trade Facilitation Agreement (TFA) that came into force in 2017. The TFA contains provisions to ensure the quick movement, release and clearance of all goods including those in transit, as well as measures for effective cooperation between customs authorities. The WTO estimates that the full implementation of the TFA could boost the export growth of developing countries by 3.5 per cent annually, as well as reduce trade costs that in some cases are equivalent to a tariff of 219 per cent on international trade. After India ratified the above agreement, the government set up the National Committee on Trade Facilitation in 2016 to facilitate domestic cooperation and the implementation of TFA provisions. They also came up with the National Trade Facilitation Action Plan for 2017-2020 whose preamble is to bring down the cargo release time for exports to two days for sea cargo and the same day for air cargo and ICDs. However, since then, there hasn't been sufficient information or follow-up regarding how these objectives are being met. India has been taking measures to promote trade facilitation before, including online approvals to exporters, same-day licensing in DGFT[1] regional offices, reduction in the maximum fee for electronic applications, setting up inland container depots to transport goods from landlocked areas, setting up an electronic data interchange (EDI) system to ensure electronic filing of the declaration of goods and their paperless processing and so on (Sengupta and Bhagabati, 2003).

Table 1: India's performance on OECD Trade Facilitation Indicators (2015 and 2019)

Indicator	Some of the questions covered	India's score in 2015	India's score in 2019
Information availability	Existence of an identified Customs website, publication of duty rates, forums to post queries and their rate of answering them, publication of import/export procedures, accessibility of documentation for downloading.	1.9	1.9
Involvement of the Trade Community (Consultations)	Public consultation between traders and government, the existence of established guidelines and procedures, number of public consultations.	1.75	1.43
Advance rulings	Whether the country issues binding advance rulings (a document that specifies the origin of the good and its tariff classification), the validity of these rulings, public availability of these rulings.	NA	1.3
Appeal procedures	Public availability of appeal mechanisms and laws related to customs, undue delays in making decisions on these appeals.	1.63	1.25
Fees and charges	Method of calculating fees and charges, availability of information on fees and charges imposed by the government, and whether these fees are reviewed to ensure they are relevant and appropriate.	1.5	1.69

[1] Directorate General of Foreign Trade

Formalities-documents	Whether copies of documents are accepted, the percentage of supporting documents that are accepted as copies, the number of documents required, and whether border agencies review the documents required periodically.	1	1.44
Formalities-automation	Percentage of import/export declarations cleared electronically, whether electronic payment of duties, taxes and fees are permitted, integration of payment system with declaration systems, usage of electronic signatures.	1.75	1.69
Formalities-procedures	Existence of a single window, average clearance time, percentage of perishable goods that undergo physical inspection, do border controls have a risk management system.	1.5	1.49
Internal cooperation	Cooperation and coordination of activities of domestic agencies involved in cross-border trade, mechanisms existing to support inter-agency coordination.	1	1.9
External cooperation	Alignment of procedures, working days and hours with neighbouring countries at borders where applicable. Cross-harmonisation of data requirements, exchange of staff and training programmes at the international level.	0.5	0.9
Governance and impartiality	Whether border agencies have an ethics policy or a code of conduct. Whether customs agencies publish annual reports and have provisions for their financing.	1.65	1.75

Source: OECD (2019)

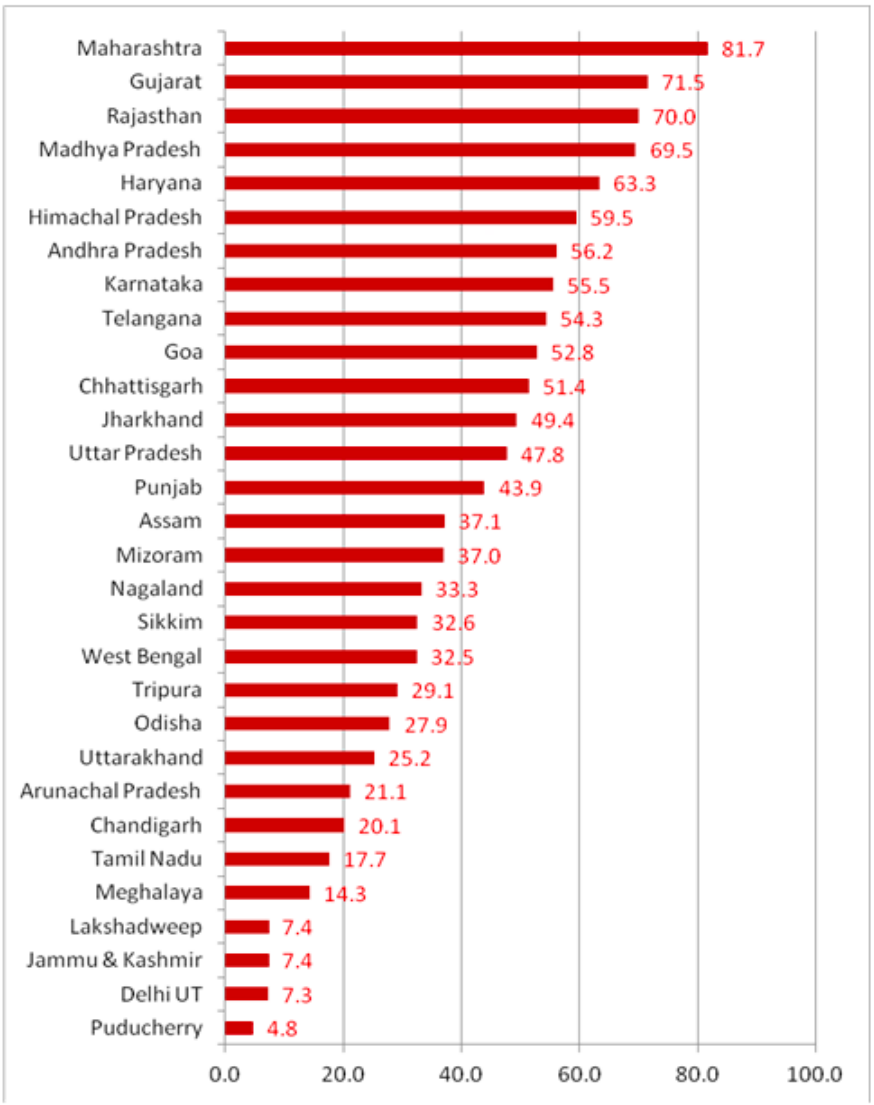
From Table 1 it can be seen that India scores well in providing information on duty rates and tariffs, as well as on documents and certification required and cooperation amongst domestic agencies. In terms of areas of improvement, India needs to work on its appeal mechanisms, issuing binding advance rulings and aligning its procedures with its neighbouring countries.

When it comes to trade facilitation specific to the agricultural sector, there is no exhaustive list and it includes the density of road and rail networks to ensure speedy transport of produce, especially from inland production regions to ports, time spent in clearance at customs and ports, inefficient and old truck fleets that could damage the produce (Weerahewa, 2009), the number of documents and days required for products to reach their destination, ability to abide by the sanitary and phytosanitary requirements as set by the importing country (ibid.) They could also include reforming land ownership policies, reforming policies of cooperatives, liberalising trade through multilateral or bilateral agreements, having single electronic windows for certification and clearance, as well as increasing cooperation at borders (ADB, 2012) and simplifying border procedures. Trade facilitation also involves the reduction or removal of non-tariff barriers to trade. Weerahewa in 2009 found that particularly in South Asia, a ten per cent reduction in the cost of exports could lead to an 11.25 per cent increase in the value of agricultural exports, given there are no quotas or non-tariff barriers.

While countries implement trade facilitation measures in general for all exports, special attention has to be given to agricultural products on account of them being perishable and them

requiring to be transported on time and in a safe manner. Moreover, special cold storage facilities need to be established and products have to now satisfy SPS requirements and other standards depending on the importing country. This makes the cost of trading agricultural goods greater than manufactured goods (Salehin, 2014). India loses nearly Rs. 50,000 crores of fruits and vegetables every year (MoFPI, 2018). In 2016, the Indian government identified three key areas for reform in the agricultural sector, which included agro market reforms, land lease reforms and reforms related to forestry on private land (Press Information Bureau, 2016). They subsequently came up with an Agricultural Marketing and Farm-Friendly Reforms Index to rank the States and Union Territories based on their implementation of proposals under these three key areas that facilitate the ease of doing agribusiness, facilitate increasing competitiveness, efficiency and transparency of agri-markets.

Figure 1: State and UTs Agricultural Marketing and Farm-Friendly Reforms Index, 2016



Source: Press Information Bureau, India. (2016)

Maharashtra ranked first with a score of 81.7 out of a possible 100. Karnataka, which is otherwise known for market reforms received a lower score that year due to a lag in the liberalisation of land leasing, as well as not integrating with eNAM[2] (Economic Times, 2019). However, in place of eNAM, it has its unified market platform called the Rashtriya E Market Services (ReMS). States not included in this index are those that did not implement the APMC Act in their state policies.

While there are several benefits to increased trade facilitation, the two most important benefits are increasing trade volumes and reducing trade costs. In South Asia, the improvement of physical and electronic infrastructure by one per cent can lead to as much as a 5 per cent improvement in trade flows (Basnett and Massa, 2015). Also, sustained implementation of trade facilitation measures in agriculture will help in poverty reduction (Flow Chart 1), increased food security, integration of small-scale farmers in the agri supply chains and enabling them to upgrade their production and harvesting activities to meet rising standards.

Flow Chart 1: Benefits of Increased Trade Facilitation Measures.

Source: ESCAP

However, there have also been some issues about the implementation of trade facilitation measures. In 1986, Guatemala attempted a single-window clearance system to reduce the average time to complete export procedures to a week from 12 days. However, this window required paper documentation and was not electronic and the average time was still considered long, especially for perishable commodities. It was only when the association of exporters specialising in agricultural goods took control of the system and enabled access to electronic data and documentation, that the time to complete procedures was reduced to 2-3 days (UNESCAP). China has adopted a practice where they provide certain farms and suppliers with the right to export produce after pre-screening them if they manage to reach the high safety and quality standards and exporters with good records are exempt

[2] National Agriculture Market. The online trading platform for agriculture commodities in India.

from this inspection. However, this system had to be discontinued due to the high costs involved in screening tens of thousands of suppliers and the risk that exempting certain exporters from inspection altogether could lead to unsafe produce passing through customs (ibid).

Another issue is when there are multiple agencies tasked with implementing these measures. For example, in the Philippines where agriculture is considered a pivotal sector, the departments of agriculture, health, science and technology, trade and industry along with local governments have been entrusted to implement food safety standards without a clear demarcation of their responsibilities. India has been praised for setting up APEDA as the main source for information on certification requirements, updated sanitary and phytosanitary standards, and packaging requirements as well as becoming a portal for farmer registration and traceability of produce for certain fruits such as grape and pomegranates.

Transaction costs

There are bound to be costs in implementing trade facilitation measures, especially with regards to improving infrastructure at ports, increasing the road and rail network, training and disseminating information to farmers regarding the various health and safety standards that need to be followed and so on. Sengupta and Bhagabati in 2003 specified how to determine whether trade facilitation measures are beneficial, in that we should compare the marginal cost of adopting these additional measures to the additional benefit accrued by adopting the WTO recommendations above the existing domestic measures. They expressed that the benefits of trade facilitation are equivalent to the reduction in transaction costs.

Transaction costs can be direct in terms of monetary costs of supplying information and documents, costs of new equipment and setting up IT services, and charges in terms of providing trade insurance and settling disputes. But there are also non-monetary costs that are indirect and refer to the delays in clearing produce for export, delays in receiving the required certification, the unpredictability of the markets and lost business opportunities due to farmers not receiving enough support or information to participate in the agriculture value chain. However, the problem with this measurement is that better implementation of trade facilitation measures will not be able to reduce all these costs, especially the unpredictability of markets or opportunity costs that farmers face when making a business decision. Hence, they proposed to focus on benefits in terms of increased competition, reduced prices, efficient use of resources, increased investment both public and private, improved standards of living and basically, increased trade (ibid; Birthal *et al*, 2005; Mattoo *et al*, 2007).

As indicated earlier, Trade Facilitation-specific studies in the Indian context are very less and within that, agricultural-specific studies are almost nonexistent. Much of this is attributed to a lack of policy in support of agricultural exports. It is only in 2018, for the first time the Government of India came up with a holistic policy in support of agricultural exports known as the Agricultural Export Policy (AEP), 2018.

The AEP 2018 has laid out objectives towards improving trade facilitation and the ease of doing business in agri-exports, which include making digital records of farmer land and satellite mapping of agricultural land, ensuring dedicated portals for market information, SPS requirements and

certification for agro exports along the lines of APEDA and MPEDA, as well as developing better grievance redressal portals. The AEP also aims at reducing the number of documents required for export and given the fragmented nature of Indian agriculture, to harmonise domestic and foreign quality standards so that domestic markets avoid receiving mostly substandard produce and to reduce the probability of consignments being rejected by importing countries. However, there is hardly any specific estimation available either by GoI or in academia to explore what it is like doing business in the context of agricultural exports. It is in this context, this study looks at the state of trade facilitation in the case of selected agricultural exports in India. Specifically through quantifying the Transaction Cost of Doing Business in agricultural exports, which includes quantifying costs and time taken to export. In addition to this, we have also documented the problem encountered by exporters.

The selection of product for the study

In terms of the composition of agricultural exports for the latest available year, marine products (17.63 per cent) followed by Basmati rice (12.22), oil meals (9.30), cotton raw include waste (8.58), spices (7.78) and misc processed items (5.46), and exports of buffalo meat are dominating. As against this, clusters identified in the new AEP, 2018 largely follow four main categories: marine products; plantation crops; fruits and vegetables and, castor oil.

Since the focus of the study is to explore the doing business of agricultural export in the light of the new Agricultural Export Policy (2018), the agricultural product for the analysis is based on the following criteria: one, what is the share of the product in the country's total agricultural exports and also their contribution in state agricultural export; Two, whether or not product are included in the Agricultural Export Policy, 2018; Three, whether or not the product has an institutional arrangement in place for facilitating exports; Four, products are spread across Indian states, which enable us to elicit state-specific issues in building value chain process and doing business. Based on these criteria, the product taken for the study and their broad characteristics is provided in Table 2.

Table 2: Characteristics of Selected Product for the Study

Products	State of origin of products	Shipped through (Port)	Institution in place for exports
Basmati Rice	Punjab and Haryana	Mundra Port, Gujarat	APEDA
Spice	Kerala	Cochin Port, Kerala	SPICE Board
Banana	Kerala	Cochin Port, Kerala	VFPCK/APEDA
Rose Onion	Karnataka	Chennai Port, Tamil Nadu	KAPEC/APEDA
Pomegranate	Karnataka	JNPT Port, Maharashtra	KAPEC/APEDA

Source: Author

The analysis is based on secondary sources such as surveys and databases. Exporters, different stakeholders involved in formulating/designing/ implementing the policy and also Custom House Agents (CHA) are the primary units of observation. Samples are drawn through both random methods and snowball sampling. Information was gathered through qualitative interviews. To strike a balance in the views expressed by exporters we chose both small and large-scale exporters across select agricultural products. The study covered 20 CHA and 46 exporters. The reason for limited samples is: One, the number of players (exporters) in exporting specific/chosen agri-products is highly skewed, some of them managing the entire production/harvest from the state. For instance, in the context of Rose onion, the exporter (currently one big exporter) is procuring the entire harvested produce and is exporting the same. Similarly, only a few state-specific exporters are involved in exporting pomegranates from Karnataka. In the present study, we have restricted our sample to state-specific exporters. Nevertheless, we covered them all. Two, leading CHAs in each state are covered to understand the nuances of trade-enabling institutions and related issues. Information gathered from CHAs and exporters are tallied against each other for further verification. Three, respective state agencies involved in implementing AEP are also interviewed to document the policy-related issues. Based on primary survey information we have attempted to quantify the transaction costs of doing trade regarding select agricultural exports, which includes both time and costs taken to export

shipment. While interpreting – this has been compared with WB's estimation of doing business data on transaction costs of trading across the border. Also, the typical export certificate/documentation involved in doing trade some of which are very country-specific are highlighted.

The Doing Business in the Case of Select Agricultural Products – field evidence

In this section, we have tried to capture the issue of doing business and trade facilitation by documenting the transaction costs of exporting select agricultural products in the country and also flagging the real issues faced by exporters. Apparently, transaction costs involved in agricultural exports are of two types. The first one relates to costs involved in handling agricultural products from the farm to the packhouse, which includes harvesting costs (which include labour costs for the same) and transport costs from the farm to the packhouse. Under the second category, it includes: packing costs, certificate/documentation costs and procedures to be followed (depending upon the destination, different protocols have to be followed for fumigation of both the container and also palate), packhouse costs (if exporters do not have their own), transport costs from packhouse to port, CFS charges and bill of lading charges among others.

In the context of Basmati Rice exports, exporters are classified based on the number of consignments they deal with per year/per month. The big exporters export an average of 28,000 containers (7-8 lakh metric tonnes) as against small exporters with 500-600 containers annually. Apparently, the issues being faced vary depending on the size of exporters. As big exporters would have established rapport both domestically and also with overseas buyers, it gives them a comparative advantage in getting information, documentation and service charges. Over the years, the government has taken several initiatives, which are successful in reducing the number of days taken to export and the corresponding transaction costs not just for Basmati rice but also for other agricultural products. Among others, it includes:

- (1) self-sealing authority (circular No. 26/2017-Customs, New Delhi dated 1st July 2017), which is introduced for the sake of uniformity and ease of doing business, the Customs Board has decided to simplify the procedure relating to factory stuffing hitherto carried out under the supervision of the Central Excise officers. The Board endeavours to create a trust-based environment where compliance in following the extant laws is ensured by strengthening the Risk Management System and the Intelligence setup of the department. It has been decided to do away with the sealing of containers with export goods by the CBEC officials.
- (2)E-Sanchar Net proposed by the Customs Department initially introduced for import has subsequently been extended for exports as well. This too substantially reduced the hassle of doing trade.

The transaction cost of Basmati Rice is approximately 35,300 to 55,000 INR and it takes almost 6-7 working days. The documentation costs are apparently on the higher side if compared with the World Bank estimates on the same. However, it takes an average of 2 days to obtain all required documentation for agriculture exports.

The transaction costs of exporting Rose Onion from Karnataka are too high, largely due to high inland Freight charges from the place of procurement/processing till the port of exit and as of now, it is not covered under any export scheme either by the APEDA and/or the DGFT. Further, Rose Onion exporters after procuring ungraded products from Chikkabalapura farmers, send them to Chennai by lorry and after reaching Chennai it is packed and graded appropriately and around that time, 20-30 per cent of the products are lost. Though the exporting community is urging to cover the inland freight charges through some scheme, it is not being addressed so far. Earlier, at least cargo charges (from port to destination) were met under the Transport Assistance Scheme, this, of late, is being discontinued quoting the financial crunch. Similarly, transaction costs of exporting Pomegranate from Karnataka are also too high largely due to the substantial inland freight cost from the farm to the JNPT port. This also substantially adds to the days taken to exports. Besides this, Pomegranate farmers in Karnataka do not have a Global GAP Certificate and also, they are not well aware of the Maximum Residual Limit[3]. As against Karnataka farmers, their counterparts in Maharashtra are very well aware of the MRL and given their proximity to the JNPT do not experience too much inland freight costs. This makes pomegranate exports from Karnataka a costly affair. Between pomegranate and onion exports from Karnataka, pomegranate exporters bear additional transport costs from farm to the packhouse, whereas recently, the KAPEC in association with one exporter has set up one packhouse near the field/farm, which substantially reduces the corresponding costs.

Concerning banana exports from Kerala, as of now, exporters are exporting it through airways which adds significantly towards their transaction costs of exporting. Currently, the VFPCK is in the process of developing protocols for sea route exports through Cochin Port. Though this is expected to substantially reduce costs associated with exporting bananas from Kerala, the sea route will add to the number of days taken to export - given their perishable nature, its effectiveness has to be seen.

[3] Currently, the KAPEC in association with a few exporters from Karnataka, is trying to facilitate farmers to obtain the Global GAP certificate in Bellary, Bagalkote and Chitradurga. Sd of 1st Feb. 2021, it was not possible for the KAPEC to bring under the ambit of the AEP - because districts identified under the AEP for pomegranate exports from Karnataka (Mysore and Belguam) are entirely different from the ones in which the state has an advantage. Though the KAPEC has written to the APEDA and also the MoA, GOI, nothing concrete was heard in the past year.

Table 3: Transaction Costs of Exporting Rice from Gujarat (Gandhidham to Mundra Port to Europe)

Sl No	Particulars	20 ft Charges costs
1	Custom freight Station charges	7500-12,000
2	THC	9500-10500
3.	Documentation (Non-GMO Certificate, EDI charges, CHA Charges)	2000
	Health certificate charges (it varies depending on by whom it is received)*	● 15, 000 (EID) ● 3000-4000 (APEDA) ● 2500 (Local authority)
	Phyto certificate charges	1500
4	Transport from the warehouse to the port	4500 -7000**
	Stuffing Charges at the Warehouse	2500
5.	Fumigation charges Waiting charges	800-2000***
6.	Bill of Lading Charges	4500
Total Costs to exports		35, 300-55, 000
Days taken		6-7

* - it is decided based on the exporters and importers. Generally based on import countries' regulation - agencies for certificate issue is being decided.
** depend on whether it is from Gandhidham to Kandla or Gandhidham to Mundra
*** depending upon the destination

If it is for Australia, New Zealand, or Russia the container has to be fumigated first then let it be empty for the next 24 hours and after that, it has to be defumigated. Then stuffing and fumigation and defumigation.

Table 4: Transaction Costs of Spice Exports from Kerala (Cochin Port) to the European Market

Sl No	Particulars	20 ft Charges
1	Custom freight Station charges* including stuffing charges	8, 000-8, 500
2	THC#	9, 300 Plus GST
3.	Documentation (including CHA Charges) Documents and charges for each one of them	2, 500- 3, 000
	Health Certificate	780 Per sample by Quasi-government agencies
	Phyto Certificate	30
	Custom EDI Charges	250-500
	Certificate of origin	250
	FTA certificate (if required)	800
4	Transport from CFS to port	7, 200
5.	Fumigation charges	1, 200 - 8, 000^
6.	Bill of Lading Charges	3, 950
7.	Other: Legalisation of document**	8, 000-22, 000
	Total	
Total Costs to exports		32, 150 -63, 150
Time to Exports		4-7 days.

Note: * This includes stuffing, sealing, custom insurance, fuel surcharge, documentation and unloading depending upon the cargo.
this includes seal charges, THC, equipment surcharge, and export container facility charges among others.
^ This is depending upon whether normal fumigation is done or standard fumigation is done. This in turn is decided by the country for which it is being exported. For instance, the majority of European Union countries opt for the high dose under supervision.
** This is the additional costs incurred by exporters based on typical documentation required by a few countries like Bahrain, Saudi, Gulf, and Egypt, wherein the document has to be approved by the country embassy or consulate.

Table 5: Transaction Costs of Exporting Rose onion from Chikkaballapur through Chennai Port

Sl No	Particulars	20 ft Charges
1	Custom freight Station charges	8, 000 – 12, 000
2	THC	9, 000 – 12, 000 plus GST
3.	Documentation (including CHA Charges) Please specify all documents and charges for each one of them.	2, 500
4	Transport from warehouse to port	70, 000 -75, 000
	Stuffing Charges at the Warehouse	2, 500
5.	Fumigation charges	2, 000 -
6.	Bill of Lading Charges	4, 500
	Total Costs to Export	58, 500 – 65, 500
Time to exports		6-7

Note: This does not include Open / Exam / Re-packing (If required) costs (1,000 per Invoice / SB)

Table 6: Transaction costs of Exporting Pomegranate from Karnataka through JNPT Port to Rotterdam

Sl. No.	Particulars	Costs		Days
		20 ft Container	40 ft Container	
1	Harvesting (Harvesting to Loading)	Rs 48,000	Rs 96,600	1
2	Transport from Farm to Packhouse	Rs 16,000	Rs 32,200	> 0.25
3.	Packaging Costs including Packhouse rent*	Rs 2,20,000	Rs 4,42,750	1-2
4	Transport from packhouse to Port*	60,000- -65,000 ^	1, 20, 000	1
5	Stuffing Charges at the Warehouse	Rs 700	Rs 700	
6	Freight charges	Rs 1,55,000	Rs 2,02,500	21-24 to reach the destination
7	THC	Rs 20,000	Rs 35,000	
8	Documentation (including CHA Charges) Non-GMO certificate charges	Rs 4,000	Rs 4,000	
9	Phyto certificate charges	Rs 1,500	Rs 1,500	
10	Bill of Lading Charges	Rs 5,000	Rs 5,000	
Total costs without fright		3,74,500 - 3,79,500	7,37,657	4.25 days/ 28.25days

Source: Author field notes
Note: * This also includes Fumigation Charges
*Assuming that it is from Chitradurga/Bagalkot to JNPT.
^ The similar costs for exporter from Maharashtra is quite low, which ranges from Rs 32,000 to Rs 64,000 respectively for 20 and 40-ft container

Banana Export from Kerala - Sea Consignment over Air Shipment a New Way of Doing Business

Kerala is one of the major players in exporting Bananas from South India. Till March 2021, the only way through which the exporters were exporting Bananas to the Middle East and European Markets was through airways via Trivandrum and Cochin Airport. Though it reached the final consumer in a short span (24-36 hrs) it cost heavily to the exporters in terms of freight costs. For instance during pre-Covid an average airline used to charge between 95-100 Rs per Kg shipment. During the peak of Covid, airlines charged 400 - 500 Rs per Kg shipment. Though the last few months have seen a considerable decline in airway charges, which is presently 260 Rs per Kg, still it is above the pre-Covid time. Subsequently, another 12-15 Rs per Kg was spent by exporters as additional costs, which included packhouse costs, transport from the packhouse to the airport and other related documentation charges. Given the negligence presence of industrial activity in Kerala and less demand for air cargo shipment, finding a general cargo slot in a short period of time is not an issue as of now, but exporters incur high freight costs through airways, which makes export of banana through airways financially less viable and less profit to exporters.

Considering the real challenge faced by exporters, the State Government has entrusted the Vegetable and Fruits Promotion Council Keralam (VFPCK), a nodal agency in complimenting AEP from Kerala, to develop a sea protocol to facilitate the shipping of the same to European countries. The programme was implemented under the Remunerative Approach for Agriculture and Allied Sector Rejuvenation programme of the Centre. A total of Rs 35 lakh was earmarked for the same. Accordingly, the first sea shipment sent to the London Gate Way Port from the Cochin Port was carried out on March 8, 2021. It is expected to reach the destination in 22-2 days. To materialise the same, several institutions were roped in for its success at various levels. It includes VFPCK (for procuring bananas from the farmers and treating them in their packhouse), National Research Centre for Banana, Trichy (for developing supporting protocol), Centrified Pack House at Muvattupuzha (packhouse-related service), Bangalore-based Agri start-up -Trace X (for technical support) among others. Krishna Traders - fruits and vegetable exporters from Trivandrum was made part of it. For 20 feet container, around 10 tonnes of Nendran variety of Banana was shipped as a part of the first sea consignment. Altogether, exporters incurred Rs 2,84,000 for this consignment, which is approximately around Rs 40 per Kg, which is almost $1/7^{th}$ of corresponding costs incurred under air shipment. Moreover, under the sea route, exporters could export in large quantities as against the small quantity of exports with huge transaction costs under air shipment. If this new venture is successful - this is going to boost the income of banana farmers besides having a huge increase in the profit margin of exporters.

Though its success is yet to be seen it represents a new way of doing business with Nendran variety of banana from Kerala. This is indeed a laudable initiative undertaken by the state government with the help of VFPCK.

Major issues affecting Doing business/trade with Agricultural products - Insights from the field

The Finance Commission in its July 2020 report, identified five key challenges to India's agriculture exports; low productivity of produce coupled with high logistical costs, low-value addition of exports, marketing challenges, non-tariff measures and lack of uniformity in the quality of produce. Low productivity is because a majority of the agricultural products are being done by small, marginal farmers who do not use modern, efficient techniques of production. While India is a leading exporter of rice, spices and fresh fruits and vegetables, it ranks low in the exports of processed foods, which make up around 25 per cent of total agri exports, compared to nearly 50 per cent for the USA and China. As a result, agri exports from India are generally of low value in nature. Indian shrimp is mostly exported in raw form instead of valued-added form such as ready-to-cook which has increasing demand from a growing consumer base.

One way to help small-scale farmers improve their incomes is through the practice of contract farming, whereby companies can provide inputs, credit and marketing services to farmers. Though contract farming is popular in developed countries and has been growing in India, due to the lack of effective laws to protect farmers, an inefficient legal system and inadequate redressal mechanisms, farmers are unable to realise all the benefits of this system (Dev, 2008). In terms of marketing challenges, India's logistics costs are nearly 14 per cent of the GDP compared to the USA where the same is less than 10 per cent of the GDP (FINCOM, 2020). There are inadequate packhouses and

grading infrastructure to sort the produce in terms of what may be processed and what may be exported. For instance, FINCOM identified that with shrimp exports, there is a lack of promotion and branding to distinguish India from its competitors. Lack of sufficient cold storage facilities affect the freshness of fish and leads to wastages of nearly 30 per cent.

Another obstacle to agri-exports is the high level of government intervention in the sector. India's trade policy in the past has focused on export and import restrictions, as well as government control over marketing and procurement, which has limited India's agricultural trade and led to price distortions. (USA Foreign Agricultural Service, 2016). For example, rice which is one of India's main agri export, due to government policies related to minimum support prices and procurement beyond buffer stock requirements, a stock which could be directed towards exports is taken away and there is price distortion which has made India's rice exports uncompetitive. There are few opportunities and incentives for private sector companies to invest and the government's export promotion initiatives have been declining over time (FINCOM, 2020).

They also noted the lack of uniform, high-quality produce. With marine exports, since there is a lack of uniformity in production by fishermen and farmers, the quality of produce is inconsistent given the low-quality seeds, and the difference in water quality, which has led to shrimp exports being rejected mainly by the EU on SPS grounds (FINCOM, 2020). Sarangi (2020) pointed out that for India's agricultural exports to grow to post Covid-19 pandemic level, the focus has to be on ensuring quality control, given the high rejections of basmati rice and shrimp exports and that 6 to 8 per cent of FOB costs to countries in Europe and South-East Asia can be reduced by improving infrastructure and reducing turnaround time.

From the trade facilitation point of view, there exist multiple agencies dealing with similar issues and not all of them have the required information regarding export procedures, yet there is no unified body to handle all SPS issues about agriculture, given India's history of shipments being rejected on SPS grounds (Sarangi, 2020). Another constraint to exports of processed food products, in particular, is the high cost of raw materials such as fruits and vegetables, given that they are fragmented in production. More so, the quality is insufficient for what is expected for processing as compared to foreign countries, as it is the residual and not fresh produce that is usually taken for processing (MANAGE, no year specified). Due to the existence of several agencies, the registration of a new fishing farm can take as many as 3-4 years as there exists several formalities, which has led to a rise in the number of unregistered ponds (FINCOM, 2020). Moreover, there is high use of antibiotics and chemicals which has stressed the environment. On account of increased stringency from importing countries, India has to work towards increasing traceability, given that in many states, farmers are not registered and ensuring the uniform quality of produce. Though agriculture is a state subject, the state's role in agriculture exports has been undefined in the past and there is a lack of synergy between the state and central governments. There is congestion at ports leading to high waiting periods for shipments which can affect perishable produce that have a shorter shelf life (APEDA, no year specified). With mango exports, there is limited cold storage, refrigerated transport and other pre-cooling infrastructure. Also, there is less traceability and low shelf life (FINCOM, 2020). Developed countries have a high level of export subsidies on their agricultural exports, which has made India's exports, such as bovine products,

less competitive (MANAGE, no year specified), and imports cheaper than domestic produce (Dev, 2008). With bovine products, there is the practice of slaughtering for meat only after milk productivity has declined which affects the quality of meat and India is yet to penetrate markets in China, the EU and the USA for bovine meat (FINCOM, 2020).

As against the issues flagged in the literature, the present study attempted to capture the real-time problems that are being faced by exporters in the context of select agricultural products despite having a dedicated export policy in place. For this purpose, we had an interaction with the exporters, CHA and state-level implementing agency of select agricultural products. The response gathered from them are presented in Table 4.7, which emphasises that gathering information is no more a hassle – thanks to the various institutions in place – at both centre and state levels. Similarly, documentation is also relatively hassle-free. However, the real challenges lie in the availability and access of incentives and export subsidies, farmer ignorance concerning the use of pesticides and quality, lack of post-harvest facilities, high inland freight costs and most importantly, a lack of coordination between the central (APEDA) and state agencies (implementing). Farmers are also not aware of the Global GAP certificate and MRL a prerequisite for exporting agricultural exports to the European market, which pose serious challenges specifically to small exporters.

Table 7: Policy Issues in the context of Select Agricultural Exports

Sl No	Indicators	Response
1	Availing information regarding the kind of documentation required.	Once the export order is signed between overseas buyers and domestic exporters, the signed contract usually has detailed information regarding the kind of documentation required and specifications for each of them. Thus, availing information regarding the kind of documentation is invariably hassle-free. Depending on whether the products are shipped by airways or sea routes, a completely different protocol is followed, including documentation and related costs. However, the real challenge is having access to changes in rules/regulations/standards in the destination country. Specifically, in the Covid-19 period, many countries have further regulated and strung the standards concerning agri-food import. Unfortunately, this was not made available to the trading community immediately and in the absence of it, many consignments got rejected.
2	Getting documentation	Based on the scale of operation, agricultural exporters can be categorised as small, medium or big exporters. Small and medium exporters typically have a few export consignments per month and largely depend on CHA for getting all documentation and procedures. Given the regular business that many CHA have with various regulatory/certificate agencies, they generally get all the documents without any hassles. Across agencies, many exporters and CHA raised hassle with respect to fumigation agencies – this is largely due to the protocol that exporters need to have, rather than real issues with the agency. Similarly, the big exporters are found to have in-house CHA, who on account of the large-scale operation do not find any issues in availing documentation. The real challenges/issues flagged concerns the validity and acceptance of many such documents issued by a competent authority across the border. Many Indian exports to the European Market get rejected despite having appropriate documentation/certificates in place. Safeguarding the exporters' interest at this juncture is completely missing. Perhaps, this is a need of the hour to undertake a detailed analysis as to why consignments are getting rejected despite having appropriate documentation in place. Given their perishable nature, the corresponding loss being faced by exporters is substantial and irreplaceable. They noticed significant variations in charges levied by different agencies for availing similar certificates.
3	Availing incentives	Invariably, a majority of exporters raised concern in this aspect. Some of the most required financial assistance is missing. For example, an exporter from Karnataka complained about the lack of inland freight subsidy and in the absence of it, the corresponding transaction costs of doing trade from Karnataka is huge

		compared with their counterpart from Maharashtra/Chennai. Transport Assistance Scheme, which invariably helped reduce transaction costs of agriculture exports, is stopped for the last two years on the pretext of a financial crunch. On the other hand, manufacturing exporters avail the same from DGFT under the MES scheme. A few exporters also raised their problem in availing duty drawback, given the interstate GST.
4	Port level	Shipping companies, on the pretext of Covid-19 and the shortage of containers, have raised the shipping charges from USD 600 to 1,900 USD. Similar instances are reported when products are shipped through airways. For instance, typical fruits/vegetables shipped through airways to Europe in the pre-Covid time are charged around Rs. 100 per kg. Similar charges were inflated to the tune of Rs. 400-500 Per kg in 2020. Now, though they have reduced marginally to Rs. 260 per kg, it is still too high compared to the earlier times.
5	Pesticide Content of Products	The majority of Pomegranate Farmers of Karnataka are not aware of pesticide management, which makes the product highly susceptible to border rejection. It is a big challenge if exporters aim for the European Market - which is very stringent in regulations and standards. Whereas, their counterparts in Maharashtra are very well-informed about it. Many farmers do not have a Global Good Agricultural Practice (GAP) Certificate, which offers a wide market for farm produce as farmers' commitment to Good Agricultural Practice. In addition to this, a farmer insists on buying the entire ungraded product, which in the process of packing and sorting will have a significant loss in volume.
6	High inland freight costs	Exporters of fruits and vegetables from Karnataka route their export through the JNPT port and/or Cochin Port. For that, first, they have to get an empty container and stuff it in their warehouse/packhouse (the major pomegranate growing districts are Bellary, Koppala and Raichur, which are geographically far away from the JNPT) and again it has to travel back to the JNPT port. The process adds significantly towards their transaction costs of trade and it becomes very difficult to compete with Maharashtra exporters as they have relatively lesser freight costs. A similar issue is reported by Rose Onion exporters from Chikkabalapura and Kolar, who route their exports from Chennai port.
7	Product of origin and exports	In the context of international trade, "Country of Origin" has a special place as it talks a lot about the country from where it is originated and not the country from where it is exported. Besides being useful in tariff classification, it is extremely important to catch the stereotypical image of the product which at a time, besides quality, is also defined by the national/place characteristics, history and traditions associated with that product. However, in the context of trade, that happens from different Indian states - this is completely sidelined even for an internal system to understand the state participation in exports of agricultural exports. It has to be duly recorded to give due acknowledgement of the state from which it is being exported. Rather, credit is given to the state from which seaport it is being exported. For instance, Gujarat is known for exports of Basmati Rice - however, it hardly has any significant area under Basmati Rice. As a result of this, the basmati rice-growing states never get their due recognition. This problem is faced by landlocked states. Similarly, many agricultural exports that happen from Karnataka are routed through Maharashtra and/or Chennai port - as a result of which, it adds significantly towards their inland freight costs. An internal system must be put in place for recording agricultural exports from their origin and corresponding inland freight costs, which undoubtedly puts them in a comparatively disadvantaged position.
8	Post-Harvest Infrastructure	The exporters of fruits and vegetables invariably complained about the lack of a proper packhouse facility near the farm. As a result of which, it is adding significantly towards their costs of doing trade - as they have to transport products from the farm to the packhouse and after treating them appropriately, they have to transport them to the port.
9.	HS Code-related issue	As of now, Rose onion does not have a separate HS Code. As a result, whenever there is a steep increase in the domestic price of Onion - (due to a mismatch between demand and supply), the Government in the past has put restrictions on the export of Onions and accordingly, there are export restrictions on Rose Onion, as well. Rose onion hardly has any domestic market, as a result of which both producers and exporters face a lot of difficulty in exporting it. It adds significantly towards their transaction costs of doing trade, both in terms of costs and time taken for the same.
10	E-sealing	To facilitate exporters, the Customs Department has announced an e-sealing facility in their warehouse. However, given the large number of actors involved, if exporters buy from suppliers, then this facility technically cannot be availed.

Source: Authors field note

Summary

Though numerous studies have attempted to explore the state of doing business and trade facilitation issues faced by exporters of goods and services not much is being done to explore similar issues in the context of agricultural exports. It is in this context, this paper within the framework of the transaction costs approach has attempted to examine the same. The analysis based on interaction with various stakeholders brings out a few interesting insights: One, as expected, issues faced by exporters vary across select agricultural products across Indian states. Two, though the amount of money spent for documentation on average is the same as found in World Bank estimates for India, charges levied to avail certain certificates differed across agencies. Many state-level implementing agencies of AEP are doing their bit to facilitate doing business with agricultural products. Three, there is a lack of coordination between central and state agencies/institutions in place for facilitating agricultural exports. Four, availing generic trade-related information, and getting documents is not a major problem for exporters but the real challenge is the validity and acceptance of many such documentation issued by a competent authority across the border. Many Indian exports to the European Market were considerably rejected despite having appropriate documentation/certificates in place. Safeguarding the exporters' interest at this juncture is completely missing. Perhaps, there is a need of the hour to undertake a detailed analysis as to why consignments are getting rejected despite having appropriate documentation in place. Given their perishable nature, the corresponding loss faced by exporters is substantial and irreplaceable. Besides this, there are numerous challenges/issues flagged by stakeholders, which need policy attention in further fine-tuning the AEP.

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