



## Constraints in Indo-Sri Lanka agricultural trade: perspectives of stakeholders

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### Abstract

India's share of Sri Lanka's imports of many agricultural commodities was declining in late nineties in spite of India's comparative advantages for many products over Sri Lanka and other countries. Objective of the study was to discuss the non-price constraints of India's agricultural exports in Sri Lanka's market. Poor quality image of India's exports of agricultural commodities was proved only in case of potato. India's onion, spices and pulses have maintained superiority over other exporters and domestic product of Sri Lanka. Unnecessary delays in ports, high level of formalities, rent seeking behavior of officials and lack of assurance of timely imports were main obstacles of India's exports. Study found that the intensity of above obstacles have been increased with regional and bilateral trade agreements as opportunities to suppress traders have increased with increased formal requirements due to rule of origin (ROO) and other criteria under SAPTA and ISLFTA.

*Keywords:* Indian agricultural exports, Indo-Sri Lanka trade, Non-price constraints, ISLFTA, SAPTA

### Introduction

Liberalized imports undermined domestic agriculture in Sri Lanka resulting in a marked fall in production of most food crops mainly pulses, chilies, potato and onions during last decade. Local farmers could not compete with the imported agricultural commodities, as they were comparatively cheap partly on account of comparatively low costs of production and to some extent due to subsidies in exporting countries (Talakotuwege, 2002). However, during last decade, especially in late nineties, India's share of Sri Lanka's imports of many agricultural commodities (mainly vegetables and pulses) were declining in spite of comparative advantages including low transportation cost compared to others as a neighboring country.

Taneja (2001) revealed that discouraging domestic policies of state governments in spite of favorable policies of central government of India, high transaction costs, cumbersome process of official channels were the reasons for high level of contraband trade between India and other South Asian countries instead of official trade. After South Asian Preferential Trading Agreement (SAPTA) also this situation remains unchanged by the reasons of failure to deal with non-tariff issues and restrictive rules of origin (ROO) (Weerakoon and Wijayasiri, 2001). Along with above factors, rent seeking behavior of officials and

unnecessary delays of clearance were hindrance for official trade between India and Sri Lanka (Taneja, Sarawanathan and Pohit, 2003). Insufficient storage capacities, delays of transport and handling cargoes, insufficient marketing channels were the bottlenecks for India's exports of fruits and vegetables (Rangî and Sidhu, 1996). Banik (2002) pointed out that exporters of India had to follow a long procedure (21 steps) and also 100 to 300 forms have to be filled in export and therefore, such procedural delays and poor infrastructure discourage exporters. Undoubtedly, all above factors discourage traders to import of agricultural commodities from India, in spite of low prices, as they are perishable or semi-perishable in nature compared to non-agricultural commodities. The objective of this paper is to discuss the non-price obstacles of Indian agricultural exports based on consumer and traders view.

### Methodology

As the study requires information from different kind of stakeholders (consumers, traders and officials) there were three sample surveys conducted in addition to secondary sources of information. The hypothesis of quality of the Indian agricultural exports are inferior to products from other countries was tested using the

data collected by the sample survey on consumers in Sri Lanka. Indiscriminate sample of 170 consumers was selected for the study to represent different types of consumers from different types of markets in Sri Lanka. As all variables are in rank scale, they were given a tabulated questionnaire to rank according to their preferences from one to n (number one for the best, two for second choice and so on). Structure of the sample is given below.

Tourist hotels	13
Hotels and guest houses (domestic)	17
Buyers from super markets	40
Buyers from normal retail shops	100
Total	170

Study site	No. of consumers	Male	Female
Urban	70	43	27
Rural	100	64	36
Total	170	107	63

Thirty-seven (37) traders who involved in trade between India and Sri Lanka were given a questionnaire to compare the selected criteria of trade between India and Sri Lanka with trade between Sri Lanka and other destinations. A sample of forty three persons, including 37 traders in the above analysis, who were involved in trade between India and Sri Lanka in different ways such as importers, exporters, brokers and officers were interviewed to find whether there is an improvement after South Asian Preferential Trading agreement (SAPTA) and India-Sri Lanka Free trade agreement (ISLFTA). Questionnaire was developed in such a way to minimize the time consumed to fill the questionnaire, as many people were very busy. Each aspect was ranked according to following scale; +2: Increased, +1: Slightly increased, 0: No change, -1: Slightly decreased, -2: Decreased. The Wilcoxon Sign Rank Test (Seigel and Castellan, 1988) was used to test the hypothesis that  $H_0: (\text{mean}) = 0$  (No improvement or degradation of criteria considered against  $H_1: > 0$  (improvement or degradation). Means and medians of each criterion were calculated to interpret the results.

### Results and discussion

The study revealed that the majority (55%) of the consumers was not aware about the source of imports of the products, which they purchase. Hotelkeepers and the buyers of super markets were well aware about the quality and the source of the products compared to

rural consumers. Among urban consumers in the sample 75.9 percent were aware about the source of imports of potato while only 23 percent consumers of the rural areas were aware about the source of different types of potato. Among consumers of onion in urban areas, 57 percent was aware about the origin while only 11 percent among rural consumers aware about the source. Regarding lentils, 53 percent in urban areas and only 7 percent in rural areas were aware about the origin. The majority of the people in rural areas do not consider the quality and the source of the product when they are buying. Another important thing was that people in high-income categories were aware about the quality and the source of the products which they are buying while rural and low income profile of the consumers does not have an idea about the source of the products. Among the consumers in the sample, no one was interested about the quality differences of pulses such as green gram, tur-dall, and cow-pea except lentils. No one could distinguish rice according to the country of origin.

Although, there were different types of criteria included in the questionnaire to differentiate products from different countries and local origin, it was found that a few criteria were important. The Kruskal-Wallis one way analysis of variance by Ranks Test (Seigel and Castellan, 1988) was used, as variables are in rank scale, to test whether those products imported from different countries were different to each other or not. Results of the Kruskal-Wallis ANOVA are given in the Table 1.

Among potato from different countries and domestic product, local product shows a significantly higher quality in all aspects due to freshness of the product. All qualities considered are significantly poor in Indian potato due to the qualities of the variety, degradation due to poor handling and careless transportation. Potato imported from other countries (Pakistan and Holland) has maintained the quality parameters well above the potato imported from India.

Indian onion shows the best quality in all aspects, taste, appearance and overall performance. Moreover, its standard size, pungency, color are preferred to other imports. For lentils also, India has maintained the quality compared to imports from Turkey. It was not possible to make statistical comparison of India's exports of dry chilies, rice, coriander, and pulses with other products as number of consumers who could distinguish these products according to source were

negligible. However, many people preferred Chinese garlic due to large size compared to Indian garlic. A few was preferred Indian garlic believing that its medicinal qualities are higher than Chinese garlic. Summing up all together, except potato, all other Indian agricultural exports have maintained qualities with domestic

production and other imports. Traders' perspectives of obstacles of Indo-Sri Lanka trade compared to other destinations were ranked in the scale of 0 to 10. The rank scores were analyzed using Kruskal-Wallis One Way Analysis of Variance by Ranks Test and results are given in the Table 2.

Table 1: Consumer preferences (results of the Kruskal-Wallis one way analysis of variance (ANOVA) by ranks)

Product: Potato				
Sample size = 76, Z = 2.39, CD = 25.62				
Criteria	K-W Statistics	Mean Rank Score		
		India	Local	Other
Appearance	204.60**	180.5 (c)	38.5 (a)	124.5 (b)
Taste	203.16**	190.5 (c)	49.5 (a)	103.5 (b)
Texture	108.93**	163.8 (c)	59.9 (a)	119.8 (b)
Free from damages	105.22**	173.3 (b)	76.5 (a)	93.7 (a)
Overall preference	201.25**	190.5 (c)	51.0 (a)	102.0 (b)
Product: Onion				
Sample size = 51, Z = 2.39, CD = 21.007				
Criteria	K-W Statistics	Mean Rank Score		
		India	Local	Other
Appearance	131.79**	38.5 (a)	128.0 (c)	64.5 (b)
Taste	117.75**	44.0 (a)	124.9 (b)	62.1 (a)
Overall preference	50.74**	54.5 (a)	103.91 (b)	72.58 (a)
Product: Lentils				
Sample size = 44, Z = 1.96, CD = 10.675				
Criteria	K-W Statistics	Mean Rank Score		Other
		India	Local	
Colour	0.49 <sup>NS</sup>	43.18 (a)		45.12 (a)
Appearance	4.28 <sup>NS</sup>	39.7 (a)		49.3 (a)
Free from inert materials	45.95**	60.13 (b)		28.88 (a)
Taste	15.35**	35.5 (a)		53.5 (b)
Overall preference	1.02 <sup>NS</sup>	42.5 (a)		46.5 (a)

Note: \* = Significant at 5% level, \*\* = significant at 1% level, <sup>NS</sup> = Non-significant.

The lowest rank score represents the best choice. Symbol (a) for the best quality.

CD = Critical difference for comparison.

Table 2: Traders' perspectives (the results of the Kruskal-Wallis One Way Analysis of Variance by Ranks Test)

Criteria	K-W Statistics	India	Other Countries
Transport cost	47.04**	23.0 (a)	52.0 (b)
Transaction cost	14.97**	45.5 (b)	29.5 (a)
Lack of coordination	1.44 <sup>NS</sup>	40.0 (a)	35.0 (a)
Unnecessary delays	19.71**	46.5 (b)	28.5 (a)
High level of formalities	29.44**	48.5 (b)	26.5 (a)
Rent seeking behavior of officials	49.88**	52.5 (b)	22.5 (a)
Communication gaps	11.46**	30.5 (a)	44.5 (b)
Lack of assurance	36.07**	50.5 (b)	24.5 (a)
Imperfect handling and packages	1.97 <sup>NS</sup>	40.5 (a)	34.5 (a)

Note: Sample size = 37, Z = 1.96, CD = 9.8

Small rank scores represent comparatively higher quality than high scores.

(a), (b), =same letter denote no significant difference and different letters denote a significant differences at = .05.

It is obvious that transportation between India and Sri Lanka is cheaper than any other destination from Colombo by air route or sea route. Cochin, Tuticorin, Chennai, Visakapatnam and Bombay were the main seaports used for the trade between Colombo and India. Therefore, there is a significant cost advantage of trade between Colombo and India compared to ports of other countries from Colombo. According to traders point of view, transaction costs of official trade between India and Sri Lanka is significantly higher than that of other destinations due to rent seeking behavior of officials of both countries, unnecessary delays and consequent damages. The stark truth was that the time period between the order and arrival of cargo to Colombo port is very long compared to other destination due to lack of coordination and lengthy official procedures.

There is no significant difference of lack of coordination between India-Sri Lanka trade and other trade channels. Unnecessary delays are significantly higher in India-Sri Lanka trade compared to trade with other countries due to official delays, delays of port clearances and long procedural channels. Rent seeking behavior of officials in both countries and high level of formalities to follow in India were dominant drawbacks in India-Sri Lanka trade and those conditions were significantly higher in India-Sri Lanka trade than that of other channels. Communication gaps were less

in trade between India and Sri Lanka due to many traders were Tamil speaking people and in both countries they were fluent in Tamil language. Lack of assurance of arriving their orders in time was another serious obstacle in trade between India and Sri Lanka. Above analysis shows that there are many drawbacks to overcome in order to improve the trade between India and Sri Lanka.

Traders were questioned about the improvement of different aspects of agricultural trade between India and Sri Lanka after liberalized trade policies of ISLFTA and SAPTA in the scale of -2 (highly reduced) to +2 (highly increased). Table 3 presents the results of Wilcoxon Sign Ranked Test and medians and means.

There were no significant change in reduction of transport cost, improvement of coordination, reduction of delays, reduction of communication gaps, increasing of assurance, careful handling, reduction of taxes, reduction of informal trade flows and improvement of formal trade flows after SAPTA and ISLFTA agreements according to traders' views. Transaction costs, formalities and rent seeking behaviors of officials have been significantly increased due to clearance certificates, Rule of Origin (ROO) certificates and other formalities under SAPTA and ISLFTA.

Table 3: Traders perspectives on impact of SAPTA and ISLFTA on Indo-Sri Lanka bilateral trade: The results of Wilcoxon Sign Ranked Test

Criteria	Z value	Mean of scores	Median of scores	Untied sample size
Transport cost	1.024 <sup>NS</sup>	+0.1628	0	35
Transaction cost	2.611*	+0.2741	0	27
Coordination between parties	1.21 <sup>NS</sup>	0.1241	0	25
Delays	1.093 <sup>NS</sup>	+0.2558	0	27
Formalities	2.644**	+0.49	+1	33
Rent seeking behaviors	3.502**	+0.69	+1	33
Communication gaps	1.031 <sup>NS</sup>	-0.07	0	21
Assurance	1.344 <sup>NS</sup>	0.23	0	28
Careful handling	0.946 <sup>NS</sup>	0.14	0	30
Profit of the business	4.131**	-0.61	0	30
Taxes	1.742 <sup>NS</sup>	-0.21	0	17
Informal trade flows	0.996 <sup>NS</sup>	-0.14	0	24
Formal trade flows	1.661 <sup>NS</sup>	0.21	0	19
Overall performance	2.033*	0.26	0	19

Note: \* = Significant at 5% level, \*\* = significant at 1% level, <sup>NS</sup> = Non-significant

Profits of individual traders were declined as number of traders involving in the business is increasing as a result of awareness and liberalized policies in Sri Lanka. However, in traders' point of view, overall performance of trade between India and Sri Lanka has been improved after the agreements between two countries.

### Summary and Conclusion

Poor quality image of India's exports of agricultural commodities was proved only in case of potato due to qualities of the varieties of India's exports, discoloration and damages due to prolonged and careless transportation. India's onion exports have maintained superiority over other exporters and domestic product of Sri Lanka. Although, transportation cost is low from Indian ports to Sri Lanka compared to other destinations, obstacles such as unnecessary delays in ports, high level of formalities, rent seeking behavior of officials and lack of assurance of timely imports were higher in trade flows from India to Sri Lanka compared to other channels. Many of the above obstacles arise due to red-tapism, bureaucratic nature and rent seeking behavior of officials, as these qualities are inherent in South Asian countries. Study found that the intensity of above obstacles have been increased with regional and bilateral trade agreements as opportunities to suppress traders have been increased with increased formal requirements due to rule of origin and other criteria under SAPTA and ISLFTA. Coordination of suppliers and importers of agricultural commodities by government or private institutions would remove or reduce the above obstacles at a certain extent.

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