

The influence of logistics competence in international trade in Sri Lanka: A contemporary study

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Introduction

International trade refers to the exchange of capital, goods, and services across international borders or territories. It is a crucial factor because, in most countries, such trade represents a significant share of gross domestic product (GDP). The paradigm of interconnectedness continues to hold command in today's global community (Edirisinghe, 2017). International trade and international logistics involve activities related to the global exchange of goods and services to satisfy needs. These activities include acquiring, developing and managing physical, financial, and human resources. International trade has existed throughout history as evident in concepts such as *Uttarapatha*, Silk Road, Amber Road, Scramble for Africa, Atlantic Slave Trade, and Salt Roads. With globalization, the international trade became a very complicated and fast evolving phenomenon. Logistics competence became one of primary key performance indicator (KPI) in international trade. This combination today has a high economic, social, and political importance. When a firm or an individual buys a good or a service produced more cheaply abroad, living standards in both countries increase (McDonald, 2017).

Logistics make a major impact on economic activity in any country (Edirisinghe, 2013). Logistics performance both in international trade and domestically is central to the economic growth and competitiveness of countries, and the logistics sector is now recognized as one of the core pillars of economic development (Arvis et al., 2016). The quality of logistics services—trucking, forwarding, and customs brokerage—is also central to trade efficiency (Edirisinghe & Jayathilake, 2014). Achievement of economic growth of Sri Lanka is expected through five hubs concept—namely, Maritime, Aviation, Commercial, Knowledge and Energy Hubs (Edirisinghe & Muller, 2013). Logistics is about managing the activities along a supply chain, from procuring materials to delivering finished goods. Logistics support effective and efficient supply chain management by integrating the flow of materials and goods from the initial purchase of raw materials through to final delivery of a product to customers.

Therefore, the competence in logistics plays a significant role in international trade thus satisfying customers globally.

A trade supply chain is only as strong as its weakest link. Progress in one area cannot always offset a lack of progress elsewhere. The policymakers must strengthen the weakest links with targeted development interventions. The container shipping, led to greatly reduced transport costs, and supported a vast increase in international trade. The management of container fleets, regardless of type and size, is a rather costly operation (Lagoudis et al., 2010). From 1981 to 2009, global transport of containerized cargo increased approximately 3.3 times faster than the world's GDP (UNCTAD, 2011). It paved the way for hub and spoke mechanism. With major shipping traffic flowing through the Indian Ocean region and growing by up to 10 percent a year, it is paramount that ports can handle cargo efficiently and effectively to ensure minimal turnaround times. Sri Lanka's geographic location is an unmatched advantage although it is not the only factor that future maritime stakeholders will be interested on. There are many lessons that could be learnt from neighbouring countries particularly, Singapore.

It is acknowledged that more than 90 percent of global trade is carried by sea (Edirisinghe et al., 2015). Shipping is a derived demand of international trade in economic terms. (Edirisinghe & Ratnayake, 2015). The container help reduces the global supply chain cost (Edirisinghe, Jin, & Wijeratne, 2016 b). Sri Lanka is strategically located in Indian ocean proximity to East-West main sea lane. This has made the country influential in international trading for many countries. Sixteen out of world's top twenty shipping lines have their presence in port of Colombo. The Greater Indian Ocean region stretching eastward from the Horn of Africa past the Arabian Peninsula, the Iranian plateau and the Indian subcontinent, all the way to the Indonesian archipelago and beyond, will be the centre of global conflicts, because most international business supply will be conducted through this route (Kaplan, 2011). This has created highly beneficial international trading environment for its stakeholders. Road transportation counts for more than 90 percent of the land transport in the island and covers more than 12,000 km of A and B class roads (Edirisinghe & Rodrigo, 2015). However, traffic congestion particularly in and around ports is a serious problem for trucking companies and comes at a high cost (Edirisinghe & Zhihong, 2014). Since the freight rates are comparatively lower the trading partners are at an advantage among their competitors. With many shipping lines are attracted to offer services in Colombo the exporters and importers have multiple sailing opportunities to and from Sri Lanka. Given the geographic factor that the country is located very close to an economic giant -India a substantial volume of Indian exports and imports are routed via Colombo. There is a tremendous pressure on

reducing logistics cost and carbon footprint (Edirisinghe & Zhihong, 2016 a). These factors provide a reasonable insight to the complex nature of logistics impact in the international trade.

The purpose of this study was to examine the influence of logistics competence in international trade with special reference to Sri Lanka. This paper discusses the factors with respect to the contemporary view of logistics competence. It intends providing the policy makers to see the need to implement coherent and consistent policies to foster seamless and sustainable supply chain operations as an engine of growth.

Methodology

The study draws attention on the analytical components of Doing Business reports of the World Bank and the International Finance Corporation, the Global Competitiveness Report of World Economic Forum, and Connecting to Compete Report of the World Bank. The study compares these data with many other domestic sources such as Central Bank of Sri Lanka, Export Development Board, Chambers of Commerce of Sri Lanka. It considers the views and data published by the United Nations, World Customs Organization, and many industry publications. The study employed both quantitative and qualitative methods to collect data. Accordingly, researcher conducted interviews with fifteen senior officers of various trade associations such as Sri Lanka Shippers Council, Ceylon Chamber of Commerce, Ceylon Association of Shipping Agents, Sri Lanka Customs and Board of Investment of Sri Lanka. The analysis is mainly the comparison of international rankings based on results of the desk research carried out into literature relating to the subject matter available in the public domain. The analysis comprised of multiple years under one source as well as single year (or average) under multiple sources/components.

Results, discussion and conclusion

The connecting to compete report considers six pillars in evaluating the logistics performances in a country namely, infrastructure, logistics quality and competence, customs, international shipments, tracking and tracing, and timeliness. The consolidated outcome reflects the global perception on the overall logistics performance of a country and termed as logistics performance indicator (LPI). It is a crucial point to be noted and alarmed that Sri Lanka is not included in the LPI for the year 2016. However, the report provides the LPI results across four editions 2010, 2012, 2014, and 2016 in the absence of LPI results for 2016 per say. Table 1 illustrates the LPI of the South Asia region that provides a comparison of the logistics competence in Sri Lanka taking these results into consideration.

Table 1 South Asia's world rank in logistics performance - LPI results across four editions 2010, 2012, 2014, and 2016 – (No. of countries evaluated 167)

Indicator	India	Pakistan	Sri Lanka	Bangladesh	Maldives	Nepal	Bhutan	Afghanistan
	Customs	46	66	79	104	83	151	134
Infrastructure	45	70	123	105	85	133	153	163
International Shipments	38	62	103	77	118	129	122	152
Logistics Quality & Competence	38	73	67	93	98	147	124	156
Tracking and Tracing	42	74	82	99	102	116	141	165
Timeliness	45	75	87	86	130	119	150	154
Logistics Performance Indicator (LPI)	42	69	86	91	100	136	140	160

Table 2 Trends of certain key influential factors for maritime logistics in Sri Lanka

	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
No of Countries surveyed	142	144	148	144	140
Non-tariff barriers	105	101	105	105	92
Trade tariffs	125	124	125	117	138
Burden of customs procedures	54	59	70	69	59
Infrastructure	60	62	73	75	64
Macroeconomic environment	116	127	120	114	115
Higher education and training,	66	79	62	72	66
Goods market efficiency	41	57	37	39	51
Labor market efficiency,	117	129	135	135	130
Financial market development	45	42	41	47	51
Technological readiness,	85	89	93	94	93
Market size	67	64	61	61	61
Business sophistication,	32	31	34	39	44
Innovation	42	58	49	46	43
GCI rank	52	68	65	73	68

Table 2 provides the trends of certain key factors that may impact logistics performance of Sri Lanka. Since the international trade is predominantly controlled by the shipping industry these facts are highly important to maritime logistics to Sri Lanka. The rankings are based on five reports published by the World Economic Forum (WEF), Geneva. The objective of WEF is to provide a

more refined assessment of the drivers of competitiveness, based on latest research and empirical evidence and using newly available datasets.

There is a key difference between domestic and international trade as the factors of production such as capital and labour are characteristically more mobile within a country than across countries. Trade in goods and services can serve as a substitute for trade in factors of production. Instead of importing a factor of production, a country can import goods that make intensive use of that factor of production and thus exemplify it. As explained the strategic hub status of Sri Lanka earlier Table 3 illustrates the share of transshipment volumes handled in Colombo for last six years.

The recognition of this strategic importance of Sri Lanka in the Indian Ocean, especially with the increasing ocean routes in this region, has received considerable attention by India. China-India, though have fundamental differences politically, has shown close corporation with Sri Lanka by agreeing to work towards bi-lateral investment and trade cooperation. Table 3 provides analysis the key outcome of Sri Lanka's locational advantages in shipping sector. The Indian Subcontinent with 15 major ports will certainly have increased traffic and demand will grow for upgraded port infrastructure and equipment. Simply, Sri Lanka needs to grow as the centre point in the SAARC and that of East Asia and Middle East. Sri Lanka has enormous potential as a maritime nation in the Indian Ocean that should be leveraged.

Table 3 Container transshipment volumes handled in Colombo (in TEUs)

Type	2011	2012	2013	2014	2015	2016	
Transshipment	Laden	2766086	2717246	2855514	3278475	3395328	3873272
	Empty	357742	347521	352603	421235	492993	481989
	Sub total	3123828	3064767	3208117	3699710	3888321	4355261
Total handling	Laden	3561674	3490696	3625098	4098284	4269749	4820622
	Empty	701213	696424	681108	809631	915718	914301
	Sub Total	4262887	4187120	4306206	4907915	5185467	5734923
Transshipment as a share of total throughput	73%	73%	74%	75%	75%	76%	

Infrastructure and international shipments show poor rankings in the LPI results which should be the priority for policy makers to attend. Boarder management is one strong pillar in effective maritime logistics. It was hypothesised that there

should be a transparency in the present regulatory system with respect to logistics and transport. Some government officers in Sri Lanka create more barriers than what is legitimately provided by the regulatory framework; International trading environment should be made totally free from the obsolete trading regulations; the bureaucratic discretion can be clearly observed in customs (i.e. “ At the discretion of the officer”); Sufficient decentralization, strong financial controls and public accountability is required for better performance in trade; and effective enforcement mechanisms of the concessions offered to international trade is required.

The international rank of Sri Lanka’s higher education and training, is lagging at 66 from 2011 to date. Similarly, the labour market efficiency is recorded a decline from poor 117th position to 130. Both these indicators provide an alarming situation with regard to the quality of employees. Logistics professionals need strong analytical skills and understanding of innovative technologies. Skills in information technology, RFID and automation etc. is now a prerequisite for a job in maritime logistics. Transportation and logistics managers need to work together with governments to make sure there are programmes in place to train future employees. Government organizations such as National Apprentice and Industrial Training Authority (NAITA) already identified this requirement and positively engage in the process of validating minimum skill requirements for employments in the logistics and supply chain area. More effective market awareness through educational institute is required for better results. This needs long term planning by the authorities. Logistics and transport should be introduced in the school curriculum at the secondary education level.

Keywords: *International trade, logistics, shipping*

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