Introduction

In the Doha Round, the WTO agreement on agriculture that came into force in 1995 provides a framework for the long-term reform of agricultural trade and domestic policies, which aimed at creating a fair competition and a less distorted sector. The framework addresses the subsidies and high trade barriers that prevent agricultural trade from establishing a fair-trading system that helps increase market access and improve the livelihoods of farmers worldwide.

In 2015, members of WTO adopted a landmark decision to abolish agricultural export subsidies and set rules for other forms of farm export support. Aligning with the mandate of the Doha Development Agenda, the Goal 2 of Sustainable Development Goals to be achieved by 2023 is set as to: "correct and prevent trade restrictions, and distortions in world agricultural market increasing through the parallel elimination of all forms of agricultural export subsidies and all export measures with equivalent effect in accordance with the mandate of Doha Development Round".

This international context is proof to the global competition for agricultural products in the future, which is set to be more intense with no exception for fruits exports, particularly from developing countries such as Sri Lanka.

Sri Lanka exports both fresh and processed fruits and vegetables. In 2019, 38,896 metric tons of fresh fruit amounted to USD 41.1 million were exported. Of that, 65 percent reached the Middle East and the Maldivian markets.

Almost 90 percent of the processed products are exported to the European market. The United Arab Emirates, Saudi

Arabia, Qatar, Maldives, India, U.K. Kuwait, Germany, and Pakistan are Sri Lanka's top fruit and vegetable export destinations. Therefore, fruit exports should be oriented towards global requirements and standards if those are to compete in a such platform.

This policy brief highlights the key findings and policy recommendations derived from the study titled "Assessing the Comparative Advantage of Fruit Exports in Sri Lanka" conducted by the Hector Kobbekaduwa Agrarian Research and Training Institute (HARTI).

Key Research Questions are:

- v. What are the fruit crops that Sri Lanka enjoys the comparative advantage and what is the level of comparative advantage/disadvantage?
- vi. What is the status of comparative advantage/disadvantage of fruit crops over the period?
- vii. Who are the major competitors of Sri Lankan fruit crops with higher comparative advantage at global and regional level?
- viii. What are the contributory factors behind comparative advantage/disadvantage of fruit exports?

The above questions were addressed by assessing Sri Lanka's international competitiveness in fruits exports in the world market by comparing the results across countries, regions, and time including all players in the international market, exporting avocado, cashew, lime & lemon, papaya, orange, mango, and pineapple. Thus, the study identified that the countries depicted in Table 1 have gained comparative advantage over above fruit exports.

Table: 1-Countries that experiencing comparative advantage over 2001 to 2019

Avocado		Banana		Cashew		Lime & Lemon	
Burundi	New	Ecuador		Benin	Kenya	Argentina	Lebanon
Chili	Zealand	Costa Rica		Brazil	Madagascar	Brazil	Lithuania
Colombia	Peru	Colombia		Cambodia	Mali	Chile	Maldives
Dominica	Saint Lucia	Belgium		Cote	Netherland	Cyprus	Mexico
Israel	Saint	Philippines		d'Ivoire	Nigeria	Dominica	Morocco
Kenya	Vincent	Guatemala		Ghana	Senegal	Egypt	South
Lithuania	South	Honduras		Guinea	Tanzania	El Salvador	Africa
Mexico	Africa	Panama		India	Togo	Greece	Spain
Morocco	Spain	Cote		Indonesia		Guatemala	Turkey
Netherland	Tanzania	d'Ivoire				Guyana	Uruguay
		Cameroon				Jordan	Vanuatu
Mango		Oranges		Papaw		Pineapple	
			-5		ipa ii	1 1110	appic
Brazil	Guatemala	Argentina	Greece	Brazil	India	Belgium	Honduras
	-				-		
Brazil	Guatemala	Argentina	Greece	Brazil	India	Belgium	Honduras
Brazil Burkina	Guatemala Guinea	Argentina Australia	Greece Honduras	Brazil Costa Rica	India Jamaica	Belgium Cameroon	Honduras Kenya
Brazil Burkina Faso	Guatemala Guinea Guyana	Argentina Australia Belize	Greece Honduras Israel	Brazil Costa Rica Cote	India Jamaica Luxembourg	Belgium Cameroon Costa Rica	Honduras Kenya Mauritius
Brazil Burkina Faso Costa Rica	Guatemala Guinea Guyana India	Argentina Australia Belize Chile	Greece Honduras Israel Jamaica	Brazil Costa Rica Cote d'Ivoire	India Jamaica Luxembourg Malaysia	Belgium Cameroon Costa Rica Cote	Honduras Kenya Mauritius Netherlands
Brazil Burkina Faso Costa Rica Cote	Guatemala Guinea Guyana India Israel	Argentina Australia Belize Chile Cuba	Greece Honduras Israel Jamaica Kenya	Brazil Costa Rica Cote d'Ivoire Dominica	India Jamaica Luxembourg Malaysia Mexico	Belgium Cameroon Costa Rica Cote d'Ivoire	Honduras Kenya Mauritius Netherlands Philippines
Brazil Burkina Faso Costa Rica Cote d'Ivoire	Guatemala Guinea Guyana India Israel Jamaica	Argentina Australia Belize Chile Cuba Cyprus	Greece Honduras Israel Jamaica Kenya Lithuania	Brazil Costa Rica Cote d'Ivoire Dominica Ecuador	India Jamaica Luxembourg Malaysia Mexico Netherlands	Belgium Cameroon Costa Rica Cote d'Ivoire Dominica	Honduras Kenya Mauritius Netherlands Philippines Portugal
Brazil Burkina Faso Costa Rica Cote d'Ivoire Dominica	Guatemala Guinea Guyana India Israel Jamaica Kenya	Argentina Australia Belize Chile Cuba Cyprus Dominica	Greece Honduras Israel Jamaica Kenya Lithuania Mali	Brazil Costa Rica Cote d'Ivoire Dominica Ecuador Ethiopia	India Jamaica Luxembourg Malaysia Mexico Netherlands Philippines	Belgium Cameroon Costa Rica Cote d'Ivoire Dominica Ecuador	Honduras Kenya Mauritius Netherlands Philippines Portugal Sri Lanka
Brazil Burkina Faso Costa Rica Cote d'Ivoire Dominica Ecuador	Guatemala Guinea Guyana India Israel Jamaica Kenya Lithuania	Argentina Australia Belize Chile Cuba Cyprus Dominica Egypt, Arab	Greece Honduras Israel Jamaica Kenya Lithuania Mali Mexico	Brazil Costa Rica Cote d'Ivoire Dominica Ecuador Ethiopia Fiji	India Jamaica Luxembourg Malaysia Mexico Netherlands Philippines Senegal	Belgium Cameroon Costa Rica Cote d'Ivoire Dominica Ecuador Ghana	Honduras Kenya Mauritius Netherlands Philippines Portugal Sri Lanka Togo

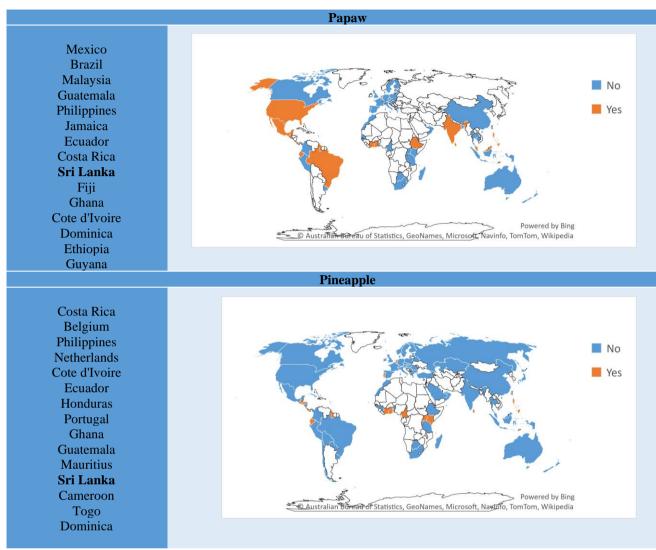
Source: Author's data computed from FAO (2021)

Sri Lanka's comparative advantage in exporting papaw and pineapple

Sri Lanka is ranked ninth in the list of countries that gain comparative advantage in papaw export. In pineapple the country is positioned at twelfth.

Further, Sri Lanka is being competitive with the advantage of net export position in both crops.

Figure:1 – Top 15 Countries in Comparative Advantage



Source: Authors computed from FAO (2021)

Major exported varieties by leading exporters

Among the leading fruit exporters that are in higher ranks than Sri Lanka. Malaysia has come up with a locally adopted papaw variety — Backcross Solo — the main reason of papaw being a plantation crop in Malaysia.

Moreover, the Philippines ranked second in growing Solo, Morado, Red royale, Carinosa, Red Lady, Sinta, and Cavite Special. In addition, a variety named Pococi which is identical to Rica is the most exported variety of the country. Lucia,

Maradol, and some other local varieties are also cultivated. As per the short cycle papaw grown in continental Europe, the common varieties in the Europe region are BH-65, Tainung 1, red Lady, and Silhouette. The most common pineapple variety with greater demand across the globe the world market is Smooth Cayenne; it is widely grown in most parts of the world. Queen or Victoria grown around Indian Ocean countries, Champaka in Asian countries, and Sugarloaf or bottle pineapple in West

Africa (Togo and Benin) are some other popular varieties.

Trends of Comparative Advantage for Sri Lanka depict an increasing trend for papaw, but it is weakening for pineapple. The declining trend of global competition of pineapple from 2000 to 2019 triggers fresh fears that if Sri Lanka loses its position in pineapple export due to intense competition, recapturing the world market would be highly challenging.

Key Recommendations

- Allocate land and other resources from agriculture as well as from other sectors to expand papaw production for export.
- 2. Make swift state intervention through fiscal and monetary policy instruments, in allocating more resources for pineapple production, given the share of forex earnings of pineapple export trade.
- 3. Invest in developing globally competitive export quality varieties. **Public** Private Producer Partnerships play a vital role in improving export supply chain of the country by providing all related information infrastructure. and Investment in research and development in this case is vital. However, the output of R&D is long term strategy, as a short-term strategy, Sri Lanka can enter into bilateral quality raw material trade pacts with regard to pineapple production.
- Aim at acquiring a suitable place in the global value chain by supplying the production that caters to the global needs.

Contributory factors of Comparative Advantage

In conclusion the study revealed the per capita GDP, government expenditure; capital labour ratio and FDI are significant and has a positive impact on comparative advantage while having a negative impact on TOT. Hence, to strengthen the comparative advantage over its contenders, improvement in identified determinants is essential.

5. Make improvements in identified determinants. Capital-labor ratio, government expenditure and FDI have promoted comparative advantage of both pineapple and papaw. Hence, improvements are essential to strengthen the comparative advantage of the country.