Sri Lanka's Trade Winds: Navigating the Currents of Climate Change

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Key Takeaways

- Sri Lanka's vulnerability to climate change poses risks to its economic development and trade patterns. Extreme weather events, sea-level rise, and resource scarcity disrupt key sectors like agriculture, tourism, and manufacturing.
- Climate-sensitive inputs and integration into global supply chains increase vulnerabilities in manufacturing. Examples like Thailand's flood losses highlight potential economic impacts.
- Unsustainable trade practices exacerbate climate issues, while sustainable practices can mitigate them. Trade offers opportunities for disseminating clean technologies and resource-efficient processes.
- Promoting trade in environmental goods (e.g., renewable energy, organic agriculture) and services (e.g., green tourism) can attract investment and align economic growth with decarbonisation.
- Including environmental clauses in trade agreements and eliminating tariffs on green products can promote sustainability and economic gains.
- Strengthening institutional capacities, engaging stakeholders, leveraging innovative trade finance, and monitoring trade policies are critical for integrating climate considerations into trade.
- By adopting sustainable practices, Sri Lanka can access growing green markets, enhance competitiveness, and drive technological advancements.
- Regulations like the EU's Green Deal and Australia's sustainability initiatives necessitate proactive adaptation by Sri Lankan exporters to maintain market access.
- International partnerships, capacity building, and financial instruments (e.g., loans for clean technologies) can support the transition to sustainable trade practices.

Sri Lanka, an island known for its rich biodiversity, faces a significant challenge of navigating the complex interplay between climate change and international trade. As the world grapples with a rising global temperature, Sri Lanka like many other countries is particularly vulnerable to the impacts of climate change. The global average air temperatures began exceeding 1.5C of warming on an almost daily basis in the second half of 2023, when El Niño began kicking in, and this has continued into 2024. These impacts can threaten to disrupt established trade patterns and hinder Sri Lanka's economic development. According to World Bank, about 19 million people in Sri Lanka today live in locations that would become moderate or severe hotspots by 2050.

This brief explores how Sri Lanka can navigate this complex landscape emerging from climate change. It proposes a multi-pronged approach that integrates climate considerations into trade policy formulation. By doing so, Sri Lanka can ensure its trade activities contribute positively to



climate action and achieve ambitious economic and environmental aspirations simultaneously, inline with the vision of becoming net zero by 2050.

Climate Change effects on International Trade: the Intertwined Landscape

Climate change and international trade are inseparably linked, influencing each other in significant ways. Climate change can disrupt trade patterns through:

- **Extreme weather events:** Rising frequency and intensity of floods, droughts, and storms can damage infrastructure, disrupt transportation networks, and negatively impact production of export-oriented goods like agricultural products. Sri Lanka has consistently been placed among the top ten countries at risk of extreme weather events by the Global Climate Risk Index (UN Sri Lanka, 2023)
- Sea level rise: This threatens coastal infrastructure, including vital ports for international trade, and disrupts coastal agricultural areas. This is also causes saline intrusion and inundating lands along Sri Lanka's coastal belt.
- **Resource scarcity:** Climate change can exacerbate competition for water resources, impacting manufacturing and agricultural sectors heavily reliant on them.

Agriculture is the sector that is the most exposed and vulnerable to climate change. Sub-Saharan Africa and South Asia are expected to experience larger negative agricultural yield shocks compared to other regions. Empirical evidence suggests that the export growth of agriculture products from low-income economies could decrease by up to 5.7 per cent in response to a 1°C temperature increase (Jones and Olken, 2010). Agricultural trade volatility and food security concerns are likely to increase further due to the risk of the simultaneous failure of crop systems in multiple food-producing countries.

The tourism sector also remains particularly vulnerable to climate change. Traditional summer destinations may lose appeal as summer months become increasingly hotter, while warmer winters are a risk to winter and mountain destinations. Rising sea levels and extreme weather conditions could also permanently damage tourism infrastructures, with economies that are highly dependent on tourism are likely to be the worst hit. The tourism industry contributes nearly 10% of global GDP and accounts for one in 10 jobs globally, but it is also one of the sectors most vulnerable to climate change (Northop, et al., 2021). According to the United Nations World Tourism Organization (UNWTO), coastal tourism destinations could lose up to USD 1 trillion in annual revenues by 2050 due to rising sea levels and increased storm intensity.

Climate change can lead to supply chain disruptions in manufacturing sectors. While manufacturing tends to be less vulnerable to climate change, sectors dependent on climate sensitive inputs (such as food processing), labour-intensive sectors, and sectors that are highly integrated into global value chains are more vulnerable to climate change. Increasingly extreme weather events are likely to impact manufacturing hubs, and may cause important cascading effects along supply chains. Floods in Thailand in 2021 hit seven industrial parks in the northern suburbs of Bangkok, affecting 730



companies, 450 of which were affiliated with Japanese businesses. The Thai government estimated the economic loss was worth 1.43 trillion baht (around USD 42.2 billion).

Climate change will alter comparative advantages, leaving some countries at a greater disadvantage. A 2.5°C increase in global temperature by 2060 could decrease export volumes by as much as 5 to 6 per cent for countries in South Asia and Sub-Saharan Africa, by 3 to 4 per cent for the Middle East, North Africa, and South-East Asia, and by 2 per cent in Latin America, compared with less than 1 per cent in Europe and North America (Dellink, Hwang, et al., 2017). Factors such as commodity dependence and lack of diversification can exacerbate vulnerability to climate change and make it more difficult for countries to develop comparative advantages in other sectors.

International Trade and Climate Change: A Double-Edged Sword

International trade practices can either exacerbate climate change or contribute to its mitigation. Unsustainable production models, energy-intensive industries, and long-distance transportation contribute significantly to greenhouse gas emissions. On the other hand, trade can facilitate the diffusion of clean technologies, promote resource-efficient production processes, and create global markets for climate-friendly goods and services (WTO, 2022).

Sri Lanka has a unique opportunity to leverage trade as a tool for both economic growth and environmental sustainability. By adopting these strategies, the nation can position itself as a leader in sustainable development on the global stage.

According to World Trade Organisation (WTO) opening up trade in energy-related environmental goods and environmentally preferable products would raise global exports of these types of goods by 5 per cent and 14 per cent, respectively, by 2030. WTO simulations indicate that the elimination of tariffs and a 25 per cent reduction in the ad valorem equivalent of nontariff measures on energy-related environmental goods and environmentally preferable products would create new trading opportunities. The increased value of trade in energy-related environmental goods in real terms is estimated at USD 109 billion and for environmentally preferable products at USD 10.3 billion.

Opening up trade in environmentally preferable products would raise exports in most regions – in some cases by as much as 30-40 per cent. Decreases in trade costs would also benefit low-income countries, which have comparative advantages in the manufacture of many environmentally preferable products. However, exports of energy related environmental goods are not projected to rise by as much, with trade diverting to large exporters benefitting from improved market access (refer Figure 01).

Regardless of these shifts, the overall economic picture is positive. Freer trade in green technologies is expected to increase global GDP by 0.8% by 2030 compared to a baseline scenario. This economic boost is expected to be seen even in regions where exports of these goods might not rise significantly. This is because removing trade barriers reduces inefficiencies and promotes higher productivity. Lower trade costs also lead to cheaper prices for technologies that improve energy and resource efficiency, further contributing to economic growth. In short, the WTO suggests that promoting trade in green technologies can create a win-win situation for both the environment and the global economy.



Figure 01: Opening up trade in environmentally preferable products would raise exports in most regions



Source: Bacchetta et al. (2022)

Note: EREG (Energy Related Environment Goods); Environmentally Preferable Products (EPP); NTMs (Non-Tariff Measures)

Therefore, trade policies can be an integral part of climate change adaptation strategies. While welldesigned trade policies can support climate change adaptation efforts. Countries exposed to climate change tend to face higher trade costs, which could prevent smooth trade-related adjustments. Simulation analysis suggests that phasing out agricultural tariffs and implementing other tradefacilitating measures instead, including efficient customs clearance and transit procedures, could reduce the impact of climate change on undernourishment by up to 64 per cent in 2050, meaning that as many as 35 million fewer people would suffer from hunger (Janssens et al., 2020).



Integrating Climate Considerations into Trade Policy

To ensure Sri Lanka's trade activities contribute positively to climate action, the country can adopt a multi-pronged approach:

A. Promoting Sustainable Trade Practices

o Environmental Goods and Services -

Sri Lanka can actively promote trade in environmentally friendly goods and services (e.g., renewable energy). This can attract foreign investment, create new export opportunities, and contribute to global decarbonisation efforts. Trade can also help to provide access to essential goods and services, such as food and medical supplies when a climate-related shock hits. For example, in response to the devastating 2022 floods in Pakistan, the government temporarily eliminated taxes and import duties on items used in flood relief operations. Trade can also contribute to speeding up the economic recovery and reconstruction from such shocks owing to sustained foreign demand on the export side and the availability of intermediate and capital goods on the import side.

- Organic agriculture: The global organic food market size accounted for USD 228.35 billion in 2024 and is predicted to reach around USD 658.38 billion by 2034, growing at a CAGR of 11.17% from 2024 to 2034 (Precedence Research, 2024). Sri Lanka, with its rich agricultural heritage, past organic agricultural methods such as Chena Cultivation and ideal climate conditions, can significantly grow its exports of organic fruits, vegetables, tea, and spices.
- Eco-tourism: Tourists are increasingly seeking eco-friendly travel experiences. Sri Lanka, with its natural beauty and diverse ecosystems, can attract environmentally conscious travelers by investing in sustainable tourism practices such as eco-lodges, responsible waste management and wildlife conservation initiatives. Sri Lanka can further strengthen its eco-tourism sector by promoting initiatives like the Pekoe Trail, which showcases the island's lush tea estates, scenic landscapes, and rural communities, offering visitors a sustainable, immersive travel experience.
- Green building materials: Sustainable construction practices are gaining traction worldwide. Sri Lanka can explore the production and export of eco-friendly building materials like bamboo, recycled plastic lumber, and energy-efficient insulation products. One notable example of Sri Lanka's progress is ITC Ratnadipa, which received the LEED Platinum certification from the United States Green Building Council (USGBC). This project serves as a powerful example on attracting Foreign Direct Investment (FDI) for green building practices.



- Trade in Services: Trade in services like weather forecasting, insurance, telecommunications, transportation, logistics and health services can play an important role in preparing for climate-related shocks, which can be traded among countries.
- **Eco-labeling and Certification Schemes:** Implementing transparent eco-labeling and certification schemes for Sri Lankan exports can boost their market value and attract environmentally conscious consumers. The National Framework on Eco-labeling in Sri Lanka provides a guide, outlining objectives, implementation mechanisms, institutional structures, and strategies for awareness and promotion. Capacity-building programmes could also focus on enhancing expertise in international standards such as ISO 14020 for eco-labeling, and ISO 14067 for carbon footprint labeling, amongst others for its effective implementation.
- **Life Cycle Assessments:** Encouraging businesses to conduct life cycle assessments of their products can help identify and address environmental hotspots throughout the production chain, leading to more sustainable practices. Furthermore, these assessments can shed light on by-products generated during production. These by-products can be valuable intermediary goods for other industries. By understanding these connections, businesses can contribute to the development of a circular economy.

B. Leveraging Trade to Support Decarbonisation and Conservation

Sri Lanka can negotiate trade agreements that facilitate access to markets for Sri Lanka's climatefriendly products like organic agricultural products. The country can advocate for incorporating strong environmental clauses into trade agreements to promote sustainable practices among trading partners.

Regional trade initiatives and agreements have been the main avenue to promote trade in environmental goods and services. In 2012, members of the Asian Pacific Economic Cooperation agreed to reduce by the end of 2020 their respective applied tariff rates to 5 per cent or less on a set of 54 environmental goods (including solar panels, wind turbines and bamboo flooring). Facilitating and promoting trade and foreign direct investment in environmental goods and services are also explicitly addressed in an increasing number of regional trade agreements (refer Figure 02). However, only two trade agreements – negotiated by New Zealand with Chinese Taipei and the United Kingdom – explicitly eliminate tariffs on a list of specific environmental goods. Some recent regional trade agreements call on the parties to address potential non-tariff measures on environmental goods and services. Some of these new provisions on environmental goods and services could provide a template to advance work at the multilateral level.

Furthermore, the most recent EU RTAs, such as those with Japan (in force since February 2019), Singapore (in force since November 2019) and Viet Nam (signed in June 2019), build on climate provisions found in previous RTAs and, in some cases, establish more specific environmental commitments.



Figure 02: Provisions on environmental goods and services are increasingly included in regional trade agreements



Source: Monteiro (2022)

Challenges and Opportunities: A Balanced Approach

While integrating climate considerations into trade policy offers significant opportunities, there are challenges to navigate:

- **Trade-Offs Between Trade Liberalisation and Environmental Protection:** Concerns may arise about potential trade-offs between trade liberalisation and environmental protection. Sri Lanka will need to strike a balance to ensure its trade policies promote both economic growth and environmental sustainability.
- **Capacity Constraints:** Implementing these strategies may be hindered by limitations in human resources, technical expertise, and financial resources. Building institutional capacity and seeking international cooperation will be crucial.
- Non-Tariff Barriers: Foreign markets may have non-tariff barriers (NTBs) such as stringent environmental regulations that Sri Lankan exports may not currently meet. Sri Lanka can work with trading partners to ensure these NTBs are transparent, and non-discriminatory, while also build its capacity for scientific justification. These include evolving regulations in key export markets like the European Union (EU) and Australia, which are increasingly focusing on environmental sustainability (refer box 01).

However, significant opportunities also exist:



- Access to Green Markets: By adopting sustainable practices, Sri Lankan exporters can gain access to rapidly growing global markets for environmentally friendly goods and services.
- **Innovation and Technological Advancement:** Integrating climate considerations into trade policy can incentivise innovation and investment in clean technologies and resource-efficient production processes, leading to long-term economic benefits.
- **Enhanced Competitiveness:** Sustainable trade practices can enhance Sri Lanka's overall competitiveness in the global marketplace, attracting environmentally conscious consumers and businesses seeking reliable suppliers committed to environmental responsibility.

Mobilising Trade Policy Actions: Practical Steps for Sri Lanka

Having identified various strategies for aligning trade policy with climate goals, the following section explores practical steps for Sri Lanka:

- **Strengthening Institutional Capacity:** Effective implementation requires dedicated human resources and expertise within relevant government ministries like Trade and Environment. Training programmes, knowledge exchange with other countries, and establishing interministerial coordination mechanisms are crucial.
- **Engaging Stakeholders:** Collaboration and buy-in from stakeholders including businesses, trade unions, and civil society is essential. Public-private partnerships can encourage innovation and investment in sustainable trade practices. Capacity building programmes for businesses, especially exporters, can equip them with the knowledge and skills to navigate the future global market.
- **Trade Finance Instruments:** Developing innovative trade finance instruments that incentivise environmentally friendly business practices can further promote sustainable trade. This could include preferential loan rates, loan guarantees, or risk-sharing mechanisms for businesses adopting clean technologies or implementing environmentally conscious production methods.
- **Monitoring and Evaluation:** Regular monitoring and evaluation of trade policy measures with respect to their climate impact is vital. This allows for course correction and ensures that trade policies are contributing positively to Sri Lanka's climate action commitments. Utilise transparent reporting mechanisms and engage various stakeholders in the evaluation process.
- **Leveraging International Cooperation:** Sri Lanka can actively seek international cooperation through partnerships with development agencies, multilateral institutions, and other countries committed to sustainable trade practices. Such partnerships can provide valuable technical assistance, financial resources, and knowledge-sharing opportunities.



Box 01: Navigating Evolving Global Trade Landscape: EU and Australian Regulations

The global landscape of trade is undergoing a significant shift, driven by increasing emphasis on environmental sustainability. Key export markets, such as the European Union (EU) and Australia, are implementing stringent regulations to address climate change and promote responsible business practices. These developments present both challenges and opportunities for Sri Lankan exporters.

EU's Green Deal and Its Implications

The EU's Green Deal, a comprehensive strategy to achieve climate neutrality by 2050, introduces several regulations with direct and indirect implications for Sri Lanka.

- **Carbon Border Adjustment Mechanism (CBAM):** Introduced in 2023, CBAM imposes a carbon price on specific imported goods. While its immediate impact on Sri Lanka is limited, by 2030, its scope will expand to include products like rubber, a significant Sri Lankan export. To prepare for this, Sri Lankan policymakers and industry stakeholders should proactively assess the potential implications of CBAM and take necessary steps to ensure continued market access.
- **Corporate Sustainability Due Diligence Directive (CSDDD):** This directive introduced in May 2024 requires companies to identify and address human rights and environmental risks in their supply chains. Sri Lankan exporters, especially SMEs, must adopt a proactive approach to sustainable practices. By implementing strong traceability systems, conducting regular audits, and obtaining sustainability certifications, businesses can mitigate risks and ensure compliance. Failure to adhere to CSDDD can result in significant penalties, including substantial fines and reputational harm.
- **European Union Deforestation Regulation (EUDR):** This regulation introduced in June 2023 aims to prevent deforestation and forest degradation associated with imported goods. Sri Lankan exporters, particularly in sectors like rubber, need to ensure compliance with strict traceability and sustainability requirements given the emphasis on land use, traceability, and forest management.

Australian Initiatives

Australia is also exploring similar initiatives to address the environmental footprint of imported goods. While concrete regulations are not yet in place, Sri Lanka can proactively adopt sustainable practices to remain competitive in the Australian market.

• Early Adoption of Sustainable Practices throughout its production processes, Sri Lanka can demonstrate its commitment to environmental responsibility, positioning itself favorably in the Australian market, which is increasingly environmentally conscious.

By proactively addressing these evolving regulations and initiatives, Sri Lanka can ensure its exports remain competitive in key markets while demonstrating its commitment to environmental sustainability. This creates a win-win situation for Sri Lanka's trade prospects and the planet.



Conclusion

Integrating climate considerations into Sri Lanka's trade policy is a strategic necessity to ensure its trade activities contribute to a sustainable future. By promoting sustainable trade practices, addressing the impact of climate change on trade flows, and leveraging trade to support decarbonisation and conservation, Sri Lanka can achieve its economic and environmental aspirations simultaneously. Moving forward, strong institutional capacity, stakeholder engagement, innovative financing mechanisms, and international cooperation will be crucial for successful implementation. This shift towards climate-conscious trade policy represents a unique opportunity for Sri Lanka to become a leader in sustainable development on the global stage.

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