Role of National Trade Policies in Mitigating Climate Challenge: An Overview

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ABSTRACT

In the backdrop of the losses incurred due to climatic events, Pakistan has pledged to reduce its carbon emissions by 50% by 2030. At least 35% of its projected emissions reduction is conditional on international financial support while 15% is unconditional. With its exports around $31.8 billion and imports roughly $80 billion in 2022, there exists huge potential for Pakistan to meet its climate commitments and fulfil its Nationally Determined Contributions by enacting trade policies that aim to curb trade-related emissions.

This policy brief analyses the role of trade policies in mitigating Greenhouse Gas emissions and examines the potential for trade policies to support the implementation of Nationally Determined Contributions in Pakistan. It suggests as to how trade can help mitigate the climate-related challenges.

It also proposes to increase access to climate finance, join international agreements regulating the flow of carbon-intensive products, mitigate cross-border emissions, develop a specialized carbon market, reduce emissions through the agro-economy, integrate tax and trade policies, and scale up access to green finance.
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Abbreviations

BoP    Bank of Punjab
CDM    Clean Development Mechanism
EAD    Economic Affairs Division
EMAS   Eco-Management and Audit Scheme
ETS    Emissions Trading Scheme
EU     European Union
GHG    Greenhouse Gas(es)
GoP    Government of Pakistan
GSP+   Generalised Scheme of Preferences Plus
IEA    International Energy Agency
IISD   International Institute for Sustainable Development
ITA-I  Information Technology Agreement – 1
ITA-II Information Technology Agreement – 2
MoF    Ministry of Finance
NDCs   Nationally Determined Contributions
NEECA  National Energy Efficiency Conservation Authority (NEECA)
NTC    National Tariff Commission
OECD   Organisation for Economic Cooperation and Development
OWiD   Our World in Data
PDL    Petroleum Development Levy
SBP    State Bank of Pakistan
SDC    Sustainable Development Conference
SDPI   Sustainable Development Policy Institute
UN     United Nations
UNCTAD United Nations Convention on Trade and Development
WTO    World Trade Organization
1. Introduction

Pakistan falls among the countries that are highly vulnerable to climate change impacts mainly because of its location at the confluence of two important weather systems, i.e. monsoon from the East and disturbances from the Western hemisphere. Such a climate-induced turbulence resulted in extreme monsoon in 2022 incurring a loss of approximately $30 billion and rendering millions of people homeless (World Bank 2022). Around 33 million people were impacted and roughly 1,500 people lost their lives in the climate-induced disaster (Peshimam et al. 2022).

The intensity of the monsoon is estimated to be 50% more severe because of global warming (Baigal 2023). The frequency as well as the intensity of such extreme weather events is set to increase and Pakistan is expected to bear the brunt of damage, barring significant efforts to mitigate greenhouse emissions as well as undertaking adaptation measures. Such mitigation and adaptation efforts require a prompt and cohesive response from policy makers and support from all stakeholders in order to be successful. Key sectors, which may contribute to mitigation efforts, could be the cement, textile and energy sectors.

Facing the prospect of huge losses due to an increase in the frequency of adverse climatic events, Pakistan has pledged to reduce its carbon emissions by 50% by 2030 compared to its business-as-usual scenario in its 2021 Nationally Determined Contributions (NDCs) (Government of Pakistan 2021). At least 35% of its projected emissions reduction is conditional on international financial support while 15% is unconditional. Preliminary assessments estimate the cost of its green energy transition alone at $101 billion by 2030, and an additional $65 billion by 2040 (ibid).

With exports of around $31.8 billion and imports roughly $80 billion in the fiscal year 2022 (Rana 2022), there exists huge potential for Pakistan to meet its climate commitments and fulfil its NDCs by enacting trade policies that aim to curb trade-related emissions.

The specific objectives of this policy brief are as under:

To analyze the role of trade policies in mitigating greenhouse gas (GHG) emissions,
To examine the potential of trade policies in the provision of support for the implementation of NDCs in Pakistan,
To highlight the examples of successful trade policies that have helped check global emissions.
2. Methodology

The main theme of this policy brief has been extracted from a high-level panel discussion held on the occasion of the 25th SDC organized by SDPI in December 2022. The panel included senior representation from the public and private sectors (Annexure 1). The recommendations and discussion were supplemented via a thorough literature review to provide an overview of the policies adopted globally and the key learnings for Pakistan.

3. Literature Review

Although trade is crucial for development, the impact of trade in mitigating GHG emissions is equally important. Without any checks and balances to limit GHG emissions, trading activities could actually result in worsening emissions. A study looking at trade and transportation from the aviation and shipping sectors indicates that 5% of global emissions can be traced to these two sectors alone (International Institute for Sustainable Development 2016). Therefore, some part of the global emissions can potentially be mitigated by using green technologies in trade and transportation.

In 2021, global trade reached almost $30 trillion from around $10 trillion in 2005 while global emissions increased by almost 25% from 29.6 billion tonnes to 37.1 billion tons over the same period (United Nations Conference on Trade and Development [UNCTAD] 2022; Our World in Data [OWiD] 2022). Energy and transport, which have a significant share in global trade, account for more than 75% of global emissions (World Trade Organization [WTO] 2021). Therefore, the positive correlation between trade and emissions is apparent, as an acceleration in global trade has been accompanied by a commensurate rise in global emissions.

4. Discussion and Analysis

Pakistan is facing a key challenge in maintaining a balance between its trade and climate policies, as the primary objective of the country's trade policy is tax mobilization rather than the promotion of sustainable development. Although the country has a small carbon footprint resulting from trading activities, a renewal of Pakistan's Generalized Scheme of Preferences Plus (GSP+) status may expand exports of textiles.

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1 Pakistan is a net importer of carbon emissions with the country importing roughly 8.6% of its total emissions in 2020 (OWiD 2022)
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and related products, which may consequently worsen its trade-related carbon footprint (Sattar and Akhtar 2022).

The country's trade policy and overall production system contributed to an unsustainable trade balance and high energy imports, as 30% of total imports in fiscal year 2021 were energy-related and 40% of total primary energy supply was met through imports (Ministry of Finance 2022; Haq 2023). The country's energy sector contributed to 46% of total emissions in the fiscal year 2022 (Waleed 2022). By comparison, the agricultural sector makes up roughly three-fourths of the country's export revenue, including textile exports, and contributed to 41% of the country's emissions in fiscal year 2022 (ibid).

For Pakistan to be able to meet its climate commitments both in terms of adaptation and mitigation, the estimated financing needs are around $348 billion (World Bank 2022). This includes $152 billion for adaptation and resilience and $196 billion for decarbonization (ibid). However, Pakistan has been slow to tap into the stream on climate finance. From 2013-2020, Pakistan received $7 billion in climate finance while Bangladesh received $14 billion by comparison and India received $37.1 billion of climate finance (Organisation for Economic Cooperation and Development [OECD] 2021). Nevertheless, a few notable steps have been taken towards expanding the accessibility of climate finance by concentrating on sustainability elements while developing regulations, as exemplified by the State Bank of Pakistan's (SBP) "Green Banking Guidelines" and "Environmental and Social Risk Management Implementation Manual," released in 2017 and 2022, respectively. This has resulted in banks differentiating between clients based on their environmental sustainability, with sustainable clients receiving funding and advances at reduced rates. Additionally, banks are actively improving their in-house capabilities for assessing clients' business cycles and the sustainability of their production practices.

It is also important for all the stakeholders to learn from the region and beyond. Following is an overview of some successful trade policies which have been implemented globally and their impact on emissions and the environment.

Carbon pricing mechanisms: Many countries have implemented carbon pricing mechanisms such as carbon taxes and cap-and-trade systems, which put a price on carbon emissions. This provides a financial incentive for businesses to reduce their emissions and transition to cleaner energy sources. One well-known example of a successful carbon pricing mechanism is the European Union Emissions Trading System (EU ETS), which has helped reduce emissions in the EU. As of 2022, around 47 countries
have imposed a carbon tax or developed an emissions trading scheme, with a total of 70 carbon pricing initiatives implemented globally (World Bank 2022).

Renewable energy incentives: Several countries have implemented policies to encourage the development and the use of renewable energy sources such as wind and solar power. For example, Germany has a feed-in tariff policy that provides financial incentives for individuals and businesses to generate renewable energy (Leiren and Reimer 2018). This policy has helped Germany to become a leader in the use of renewable energy and has reduced emissions in the country.

Clean technology transfer: Some countries have implemented policies to support the development and transfer of clean technologies to developing countries. For example, Clean Development Mechanism (CDM) under the Kyoto Protocol allows countries to invest in clean energy projects and receive credits for the emission reductions achieved. This helps reduce emissions in developing countries and supports the transfer of clean technologies.

Sustainable production and consumption: Many countries have implemented policies to promote sustainable production and consumption such as eco-labelling programmes and regulations on the use of hazardous chemicals. For example, the EU has implemented the Eco-Management and Audit Scheme (EMAS), which provides recognition and support to organizations that implement environment-friendly practices (International Energy Agency [IEA] 2017). This helps reduce emissions and promote sustainable production and consumption.

These are a few examples of successful trade policies that have been implemented in other countries. It is important to note that the impact of these policies on emissions and environment will vary depending on the specific circumstances in each country. However, they provide a good starting point for policymakers, who are looking to implement trade policies that can help mitigate the climate challenge.

5. Policy Recommendations

Based on the above-mentioned discussion, the following measures are proposed:

Increased access to climate finance: To tap into the available pool of international climate finance, the government should adopt an integrated approach to climate finance with coordinated efforts from all ministries. In this regard, a pipeline should be
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developed for sustainable/green finance besides imposing carbon taxes on unfriendly carbon imports. In addition, the government should develop mechanisms to track the flow of climate finance, and design a climate framework to assess the climate credit hotspots. To increase access to climate-related financing, the United Nations (UN) should devise a formula based on the climate-induced damages countries have faced in relation to their total emissions.

Becomes a part of international agreements: Pakistan is not a part of three WTO agreements. These include the “Information Technology Agreement-I” (ITA-I), “Information Technology Agreement-II” (ITA-II) and the “Environmental Goods Agreement”. The third agreement addresses the removal of tariffs on potentially beneficial environmental goods and services. The country needs to become a part of the international agreements in order to bring its trade policies in line with international best practices with regard to the classification of environmentally harmful goods and services, tracking and disclosures of emissions, and the elimination of tariffs on beneficial environmental goods and services.

Mitigation of cross-border emissions: To curb cross-border emissions, the government should increase the uptake of green technologies and introduce measures and policies for the indigenous manufacturing of green technologies in Pakistan. Although there needs to be a focus on switching from conventional to non-conventional sources of energy, the government should place less reliance on the import of solar PVs.

Bottom-up approach to policy formulation: Role of provincial and local governments needs to be strengthened to drive the desired changes towards sustainable production and consumption. The government should also introduce a mechanism to showcase the amount of development funding for climate-friendly projects available at grass roots level and integrate trade and climate policies across public investment in all sectors. Furthermore, the provinces that have launched their climate change policies should be facilitated by the federal government for their timely implementation.

Develop a specialized carbon market: To develop a specialized carbon market, the government needs to develop a comprehensive policy framework that outlines the objectives, rules, and regulations for the market. This framework should include clear definitions of what constitutes a ‘carbon emission’ and how these emissions will be measured, reported, and verified. Further, there is a need to identify the sectors such as power generation, transportation, and manufacturing, which are the largest contributors to carbon emissions in the country. A carbon offset programme, which would allow emitters in Pakistan to offset their emissions by investing in emissions reduction projects in other countries also needs to be implemented.
Mitigating emissions through the agro-economy: To mitigate the climate challenge, the government should publish figures regarding emissions from specific commodities to provide a complete understanding of the product lifecycle in terms of emissions. The government should also incentivize farmers to use less fertilizer, which is a major contributor to non-CO2 emissions. For this, there is a need to promote the use of high-efficiency drip irrigation systems. Farmers should focus on improving efficiency in agricultural production and increase the use of precision agricultural technologies.

Integrated tax and trade policies: Inconsistency in tax and trade policies has significantly hampered the mitigation effort. For example, Pakistan renamed the Petroleum Development Levy (PDL) as a carbon tax, a policy which was scrapped after a short time later. To improve sustainability in trade and tax policies, the government should ensure policy consistency, improve inclusivity, develop competitiveness by removing protection from dying industries, and introduce a national greenhouse gas policy accompanied by the related core data on emissions from the agriculture, energy, trade, and other interrelated sectors.

Scaling-up green finance via green/blue bonds: The green finance industry has grown significantly to reach a value of $1 trillion globally (Chestney 2021). In India, corporations have already raised a cumulative amount of $19.1 billion through the issuance of green bonds as of December 2022 with energy companies leading the way (Singh 2023). To ensure compliance with the standards for issuing green/blue bonds, the government should adopt the best practices from international green/blue bond launches. Corporate entities in the country should also explore the opportunity to access the international green bond market based on what has been done by cement and energy firms in India.

6. Conclusion

This policy brief looks at the nexus of Pakistan’s trade and climate change policies and how trade policies can be adapted to help Pakistan meet its climate-related goals and commitments. The purpose of this policy brief is to evaluate the efficacy of trade policies in reducing GHG emissions to identify successful trade policies and practices that have contributed to global emission reduction, and propose recommendations for utilizing trade to mitigate the climate challenge in Pakistan.

Successful examples of global policies have been highlighted such as carbon pricing mechanisms, renewable energy incentives, and transfer of clean technologies that can be employed by Pakistan. Key recommendations include increasing access to climate finance, becoming a part of international agreements, mitigating cross-border
emissions, adopting a bottom-up approach to policy making, integrating tax and trade policies, and scaling up access to green finance. Expediting the process can help Pakistan ensure its trading practices are brought in line with the best practices used globally, ensure adequate climate mitigation and adaptation funding, and help Pakistan achieve its NDCs.
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Peshimam, GN, Hassan, SR 2022, Death Toll in Pakistan floods nears 1,500; hundreds of
Annexure 1

Mr. Sayem Ali, Chief Economist
Participants of panel discussion held on the occasion of the 25th Sustainable Development Conference

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