



EXPLORING THE CAUSES OF DECLINE IN PAKISTAN'S RICE EXPORTS: A QUALITATIVE ANALYSIS

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Abstract

Pakistan's rice export sector lost 40% of its export value in the past few years. Pakistan policymakers, exporters, and farmers are worried. This research has the aim of understanding the driving factors of the decline in rice export sector. This researcher has adopted a qualitative, exploratory, and interpretive research design to study driving factors. The researcher conducted semi-structured interviews with key stakeholders (i.e., farmers, exporters, policy makers, and millers) and conducted a document and policy analysis. The researcher conducted a thematic analysis and identified 10 factors that are likely to interconnect. The factors are: (1) macroeconomic and financial impediments, (2) agricultural production challenges, (3) climate and environmental shocks, (4) trade policy and regulatory barriers, (5) quality standards and SPS compliance issues, (6) the state of the global market, (7) supply chain and logistics, (8) institutional and governance challenges, (9) the farmer-exporter divide, and (10) geopolitical issues. The fundamental components of the last three decades that are truly the driving factors of the decline in rice export sector are in Pakistan's case poor soil infrastructure, weak governance, and no solid inter-sectoral collaboration. This study is primarily directed and focused towards the farmer, the exporter, and the government and will likely result in the improvement of policies, quality, supply chain, and the relationship between farmers and exporters. This research will be recognized as one of the extensively documented and multi-faceted given the large number of variables involved and the vast number of possible relationships. This research has described the obstacles to exporting agricultural goods in a developing economy. In simple terms, the research is directed and focused towards the farmer, the exporter, and the government. The research has multiple objectives. Ultimately, it is likely to result in the improvement of policies, quality, supply chain, and the relationship between farmers and exporters.

Keywords: *Pakistan, Rice Exports, Qualitative Study, Export Competitiveness, Thematic Analysis, Supply Chain, Climate Change, and Trade Policy*

1. Introduction

With the particular attributes of its fragrance, length of the grain, and cooking quality, Pakistan is recognized as one of the pioneers in the growing and exporting of basmati rice. Pakistan is and has been since its early years known as one of the leading rice producing and exporting countries in the world. The rice sector in the country is of crucial importance as millions of smallholder farmers and farm laborers, as well as, those working in the rice milling, rice trading and rice exporting all depend on these vertically integrated businesses



(Mustafa & Husain, 2023). For the last few decades, rice exports have been the main linkage of rural agricultural in Pakistan and the other trading economies (Varma, 2025). The rice has been of high quality and therefore has been of high demand in the Middle East, Africa, Central Asia, and the European Union (Abbas, 2022). In most of these countries, Pakistani rice was the only rice available and therefore Pakistan was the only country exporting rice to these countries. Rice also had the highest quality and competed on the basis of price as well. There is not much literature that addresses the price of Pakistani rice. The last couple of decades, Pakistan rice exporting businesses have faced several challenges and have been on the losing side of the trade. Some of these challenges include problems with infrastructure, and farming customs (Kea et al., 2020). These problems within the rice sector of the economy have made Pakistan the most vulnerable to risks such as the instability of the economy, climate disasters, and changes in the world trading businesses (Moazzam et al., 2025).

Furthermore, rice is among the most essential agricultural exports of the country, and continues to be important for the earning of foreign exchange for the economy (Ravi Kumar et al., 2024). The foreign exchange earned through the exports of rice helps to ease the country's balance of payments problem and helps to bolster the foreign exchange reserves of the country especially when there is limited access to external financing (Mansab, 2022). The rice export industry also provides income to rural households as farmers and workers in the processing, transport and trade of rice products (Khan et al., 2020). In light of the limited diversification of Pakistan's exports in high-value manufactured goods, export of agricultural products like rice has a stabilizing impact on the country's exports (Ahmad et al., 2024). Hence a consistent drop in rice export earnings impacts the agricultural sector, but, macroeconomic stability, fiscal planning, and the management of the external debt as well (Luhwago et al., 2023). Consequently, rice export earnings are seen by policymakers as a measure of the status of agriculture and the external sector as a source of resilience (Islam et al., 2024).

The most recent data from official trade channels documents a troubling drop of about 40% in Pakistan's rice exports, constituting one of the most serious contractions the sector has suffered and recorded in recent years (Tayyab and Ali, 2021). The decline takes place in the context of a global demand for rice that has remained unchanged, indicating that the problems here are largely domestic (Tayyab and Ali, 2021). Pakistan's rice price competitiveness in international markets has been eroded significantly due to rising inflation, increasing prices of energy and other critical production inputs (Noor et al., 2023). The situation has also been compounded by the climate-related disruptions of flooding and monsoon irregularity which have deteriorated the quantity and quality of rice to and the consistency of the output (Mazhar et al., 2022). Price pressure of Pakistan's rice and reduced share of the country in traditional export markets has been a result of greater competition of the country from the other rice-exporting countries, especially India, Vietnam, and Thailand, (Gul et al, 2022). The depth and magnitude of the situation are a result of much deeper structural, institutional, and policy-related problems rather than the short-term, cyclical problems that normally characterize the industry (Liu et al., 2022).

Constraining rice exports are, to an extent, strategically important to Pakistan's economy, yet previous studies have focused on trade volume, price competition, and econometric modeling, with no or little attention to export decline drivers of a qualitative nature (Zahra & Mumtaz, 2021). Presently, rice exports are down 40%. Such a decline is multi-factorial concerning the economic, agricultural, environmental, institutional, and



geopolitical domains and is thus a lack of numerical data, not so merely a lack of data (Ahmad et al., 2024). The gap pertaining to the empirical research that integrates the voice of the rice-export ecosystem (farmers, exporters, policymakers, trade officials, etc.) remains as the missing literature (Khan et al., 2021). Without such research, policies to be formulated will miss the target and be out of alignment with the reality on the ground (Nga & Xoan, 2024). The need to study the literature qualitatively becomes paramount in identifying export decline drivers and the contextual barriers around export competitiveness (Choudhary & Shah, 2025). In complementing the existing quantitative literature with qualitative literature, this study Akhtar et al., 2024, attempts to address the literature gap and provide actionable literature to policymakers.

This study analyses the macroeconomic environment, obstacles in agricultural production, climate and environment shocks, the impact of trade policies, the trade policies, the power of institutions, and the geopolitical scenario affecting exports of rice from Pakistan (Mohd & Siddiqui, 2020). This study relies on thematic analysis to recognize and explain some phenomena concerning stakeholder sentiments in various segments of the rice value chain (Asghar et al., 2021). This study analyses the phenomena of structural and governance constraints in the field of exports, and it is useful to policymakers and institutions concerned with the promotion of exports (Ghauri et al., 2020). This study also looks at the agricultural trade literature in framing challenges developing countries face in terms of low export competitiveness in unstable and climate stressed economies (Tandra & Suroso, 2023). This research will help design policies to promote the rice sector of Pakistan in the international market in more inclusive, integrated, and resilient ways (Nhung & Wang, 2022). This research, by the use of qualitative data, seeks to meet the challenges of the policy-making and implementation divide (Khan et al., 2023).

The study is organized as follows: chapter two contains a detailed literature review on the subjects of judicial review, annulled judgments, and the operational bottlenecks of the lower judiciary. Chapter three presents the research methodology, specifically the methodology, the parameters of case selection, and the procedures for the collection and analysis of data. Chapter four presents findings and analysis, including the primary and secondary themes of the voided decisions of lower courts. Chapter five is dedicated to the discussion, practical implications, and limitations of the study including the delineation of the avenues for further research.

2. Literature Review

Export activities for agricultural goods in developing countries is said to be a function of how efficient countries can produce, how competitive the prices are and the availability of markets to sell the products (Abdullahi et al., 2021). Research shows agricultural products are often impacted dimensionally due to supply shocks stemming from climate change, this includes floods, drought and temperature shifts, which negatively impact and result in the loss of crop yields, quality of the crop and reliability of the export (Nigatu et al., 2020). The loss of agricultural products due to climate change, coupled with the production instability of agriculture, often results in a decrease of the volume of production, and contributes to an increase in the volatility of the prices, and thus less competitive agricultural exporters lose their position in the markets of the world (Ke & Zhang, 2024). At the same time, export results are also determined to a large extent by the way trade policies are designed. inconsistent policies on exporting, unpredictable tariffs and sudden implementation of bans



on exports lead to a loss of confidence of exporters and this disrupts a trade relationship for a long time (Maharij & Jabeen, 2023). It is said that predictable policies regarding trade lead to more competitiveness of agricultural products in exports resulting from lowered transactional costs and more incentives geared towards the production systems that are oriented towards exports (Abdullahi et al., 2022).

There is a considerable amount of literature stating that adherence to international standards of quality and SPS that governs the international markets is a game changer for entry into high value agribusiness export markets (Saxena et al., 2025). Due to lack of testing, poor certification, and limited traceability developing nations have to contend with export rejection and consequent loss of market share (Ravi Kumar et al., 2024). Research also shows quality control on the farm and across the value chain, and farm level excessive use of pesticides, are barriers to sustained export growth of agricultural products (Shah et al., 2022). Apart from border controls, chain and logistics barriers, including high transport costs, congested ports and poor storage, and losses after harvest, have been identified as the persistent major barriers to the export of agricultural products (Ahmad et al., 2020). Modern supply chain management and improved logistics are important for the maintenance of quality, shorten delivery periods, and enhance competitive advantage of exports in the international market for agricultural products (Hussain et al., 2020).

The effectiveness of governance and the quality of institutions are noted as the leading factors influencing agricultural export performance in developing countries (Varma, 2025). In export promotion, poorly coordinated trade-related institutions, ineffective regulation, and corruption, are said to increase transactional costs and create disincentives to participate formally in export markets (Abbas, 2022). Moreover, a number of studies note that insufficient stakeholder engagement during the policymaking process tends to create export policies that are disconnected from the reality of the challenges that farmers and exporters face (Kea et al., 2020). Despite the copious amount of literature on agricultural exports, a qualitative and context specific analysis that examines the literature through an economic, environmental, institutional, and supply chain lens remains an under researched area (Moazzam et al., 2025). Much of the work to date tends to focus on only quantitative evidence and in so doing, neglect the insights and experiences of the primary actors in the export process (Ravi Kumar et al., 2024). This gives rise to the evident need to conduct qualitative research analysis on the agricultural exports to improve trade policies and make them more inclusive (Mansab, 2022).

3. Methodology

This paper takes a qualitative exploratory interpretive research approach to understanding the primary reasons behind the decline of rice exports from Pakistan, based on the views of key stakeholders (Creswell & Poth, 2018). Given the complexity of social, economic, and institutional factors likely contributing to the problem, a qualitative approach is most suited, as it is likely the only approach that provides a complete picture (Nga & Xoan, 2024). The study utilizes the thematic analysis framework, which offers the most fertile ground, in a less restrictive and more contextual manner, to understand the complexities of the problems surrounding the challenges of exports (Braun & Clarke, 2006). The primary research method for data collection consisted of semi-structured interviews, which combine the advantages of the qualitative and quantitative paradigms (Nigatu et al., 2020). Also, to strengthen the findings through data triangulation (Ke & Zhang, 2024), the author(s) conducted a document



and policy analysis of some reports, trade policies, and regulations concerning the rice export sector of Pakistan. The authors used purposive sampling to gain insight from those with firsthand expertise about the rice export value chain (Maharij & Jabeen, 2023). The main stakeholders for the study were rice farmers, exporters, millers, and policymakers, as they contribute to the understanding of the production, processing, and regulation of the market, as well as the export related barriers (Saxena et al., 2025). The authors describe the process of thematic coding of interview transcripts and other relevant documents, either manually or with the use of qualitative data coding software, NVivo or Atlas.ti, to code the data into themes and sub-themes (Shah et al., 2022). In this study, ethical considerations were strictly adhered to, including, the obtaining of informed consent, participant anonymity, confidentiality and assurances that the data would be used for academic purposes only (Khan et al., 2021). These measures helped to protect the participants of the study and the integrity of the research (Creswell & Poth, 2018). The following research questions were.

- *What structural and policy-related factors contributed to the 40% decline in Pakistan's rice exports?*
- *How do stakeholders perceive the role of governance and market access in export decline?*

4. Results and Analysis

The combination of macroeconomic instability and production-side constraints causing low export competitiveness at different levels of the value chain collapse all dimensions of Pakistan's rice export decline as illustrated in Table-I. Macroeconomic and financial constraints show the most prominence. Respondents noted high energy prices and taxation coupled with currency volatility and inflation as hindering export initiatives. Since exchange rate uncertainty is likely to engender transaction risks for exporters, inflation, expensive production inputs, and high energy tariffs likely shift the production costs and Pakistani rice's international price competitiveness to the bottom. In addition, a lack of investment to improve quality and to broaden the market was a result of exporters' limited access to credit coupled with incentive withdrawal. These macroeconomic challenges are further compounded with a disintegration in agricultural production which explains export performance outcomes – the combination of the climate, water, and the costs of agricultural inputs of which all combined reduce the volume and variability of exportable surpluses. Lastly, some respondents noted that an absence of effective protective measures and pest infestations contributed to the production quality decline. This noted an interdependence between the production inefficiencies and a decline in Pakistan's rice exports.

Moreover, only climate-related shocks emerged as an increasing concern to the climate-related shocks in the Pakistan rice sector. In the past climate shocks and continuing ecological degradation leaves Pakistan rice sector increasingly vulnerable. Continuously flooding as well as erratic monsoons and elevated soil salinity regionally affect the damage calamitous rice production in multiple cycles and harvests. In rice-dependent production zones, climate adaptation options work primarily on default, while crop insurance social systems, or adaptation gaps and farmer decision production as well as heighten of market participation closely to production. Added to regulation and the trade policies, these shocks cumulative and eco separation production environmental instability. Inconsistent policies, and period abrupt quotas export reflexes shocks to exporters trade and confidence relations



prolongs inter-export delays and cycles to undermine export erodes. Greater compliance weak frameworks and the of till documentation barriers the of importing countries Pakistan's ability costly response to shif to global markets negatively.

Lastly, the weaknesses in quality management, logistics, and institutional governance in the field of rice export from Pakistan in the context of the increasing competition on the global market for rice have been pointed out by the results. Failures on the quality, standards, and compliance with SPS requirements along with underdeveloped processing facilities, difficulties in traceability, and the presence of pesticide residue were mentioned as issues that led to the loss of export and the loss of entrance to the market. These issues were aggravated by logistics and supply chains where high freight, congestion in ports, lack of adequate infrastructure for storage, and loss of products after harvest led to greater delays and to loss of quality of the products. Promotion of weak exports, bad management of standards, and governance issues (especially rent seeking and lack of constructive dialogue with stakeholders) were mentioned as factors that resulted in lack of collaboration in the export development field. Multi-level governance issues have been observed as factors that negatively affected balance. This weak governance has led to less collaboration and weak governance in the field of exports. The presence of intermediary traders, lack of contract farming, poor communication of prices, and lack of market volatility, and consolidation of farming have led to a clear separation of traders and farmers. The perception of the factors that negatively affected the confidence of buyers and access to the market have been observed and documented as political instability, imposition of sanctions, and imposition of embargoes. The factors mentioned above have led to a perception of lack of confidence of the buyers of Pakistan rice and the absence of a market.



Table-I: Themes Descriptions

Sr.	Main Theme	Sub-Categories / Sub-Themes
1	Macroeconomic and Financial Constraints	<ul style="list-style-type: none">• Currency volatility and exchange rate uncertainty• Rising inflation and cost of production• High cost of credit and limited access to export financing• Energy price hikes (electricity, gas, fuel)• Increased taxation and withdrawal of export incentives
2	Agricultural Production Challenges	<ul style="list-style-type: none">• Decline in rice yield per acre• Climate change impacts (floods, droughts, heat stress)• Water scarcity and inefficient irrigation systems• High cost and low quality of seeds and fertilizers• Pest attacks and inadequate crop protection mechanisms
3	Climate and Environmental Shocks	<ul style="list-style-type: none">• Flood damage to rice-growing regions• Unpredictable monsoon patterns• Soil degradation and salinity• Weak climate adaptation strategies• Limited crop insurance coverage
4	Trade Policy and Regulatory Barriers	<ul style="list-style-type: none">• Inconsistent export policies and sudden bans• Delays in export refunds and rebates• Complex documentation and customs procedures• Weak coordination among trade-related institutions• Non-tariff barriers imposed by importing countries
5	Quality, Standards, and Compliance Issues	<ul style="list-style-type: none">• Failure to meet international sanitary and phytosanitary (SPS) standards• Poor grading, sorting, and processing facilities



		<ul style="list-style-type: none">• Lack of traceability and certification (e.g., ISO, HACCP)• Excessive pesticide residues• Inadequate quality control at farm and mill level.
6	Global Market Dynamics	<ul style="list-style-type: none">• Increased competition from India, Vietnam, and Thailand• Price undercutting by competitor countries• Shifts in consumer preferences toward premium or organic rice• Global supply chain disruptions• Changes in import policies of major buyers (Middle East, Africa, EU)
7	Logistics and Supply Chain Inefficiencies	<ul style="list-style-type: none">• High freight and shipping costs• Port congestion and delays• Poor storage and warehousing infrastructure• Post-harvest losses due to outdated handling practices• Limited cold-chain or modern logistics support
8	Institutional and Governance Weaknesses	<ul style="list-style-type: none">• Weak export promotion mechanisms• Limited support from trade development authorities• Ineffective monitoring of export standards• Corruption or rent-seeking in export-related processes• Lack of stakeholder consultation in policy formulation
9	Farmer–Exporter Disconnect	<ul style="list-style-type: none">• Lack of integration between farmers and exporters• Exploitative role of middlemen• Limited farmer awareness of export quality requirements• Absence of contract farming arrangements• Poor price transmission mechanisms
10	Geopolitical and Regional Factors	<ul style="list-style-type: none">• Regional trade tensions• Preferential trade agreements favoring competitors



- Political instability affecting buyer confidence
- Compliance issues related to international sanctions regimes

Mind Map of Qualitative Determinants Behind Pakistan's Rice Export Decline

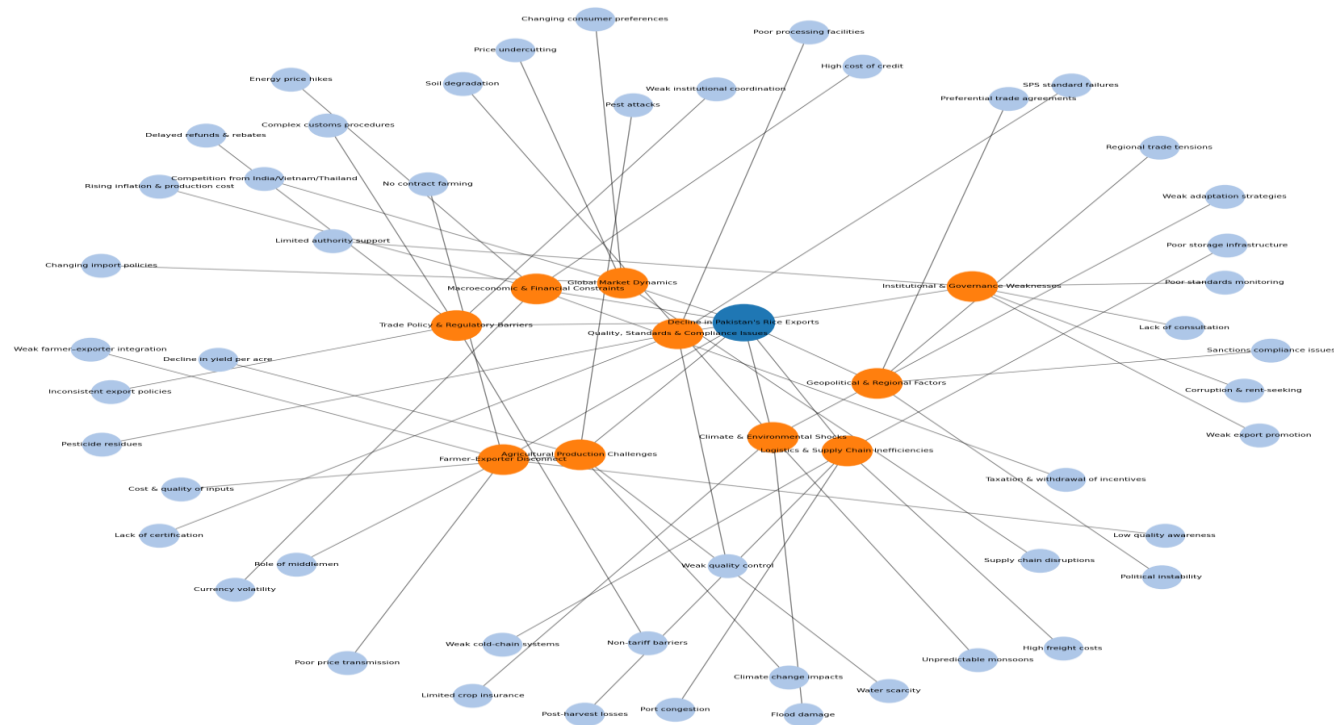




Figure-3: Words Tree

5. Discussion

The study's results confirm most current research on the agricultural exporting, climate vulnerability, and trade competitiveness nexus. Noor et al. (2023) state that the decline in rice exports from Pakistan is indicative of structural challenges, and not merely temporary market issues. From Pakistan's macroeconomic problems (e.g., currency fluctuations, rising production costs, and export financing constraints), we see the same problems noted in Mazhar et al. (2022) where climate trade macroeconomics is thought to be the most important in relation to the trade of agriculture). In the same way, and the most important of the challenges noted in Gul et al. (2022), is climate change and environmental degradation that has particular reference to the production of rice and in Pakistan's case the also the flooding, droughts, and saline soil). The same problems, trade policy contradictions, delays, and loss of trade and regulatory barriers, have also be noted in Liu et al. (2022) where the loss of



competitive advantage in the world market through the export of undeveloped nations is attributed to the lack of adequate institutions and governance). These problems confirm the lack of interrelated structural barriers regarding production, policy, and market problems which most characterize the barriers to trade in developing countries. The close nexus between these barriers explains the reasons that Pakistan has sustained a serious decline (over 40%) in rice exports.

There is limited documentation on the specific factors explaining Pakistan's Rice Export Sector set back of 2021. Aside from complimenting literature, the study explains the factors that caused an enduring decline. Long term vulnerabilities, structural weaknesses i.e. poor infrastructure, quality control, and stakeholder coordination, and a fractured farmer–exporter system, are the factors that are less likely to respond to short-term adjustments (Zahra & Mumtaz, 2021). Sudden currency depreciation and temporary climate shocks are short term crises that worsen the structural weaknesses, but are not the reason for the enduring decline. Pakistan is less resilient compared to other competitors like India, Thailand, and Vietnam because of high SPS (Sanitary and Phyto-Sanitary) measures, and inadequate policies (Ahmad et al., 2024). Competitors have adjusted to the market and climate shocks and maintained their market shares by investing more in quality control, modern logistics, and farmer–exporter partnerships (Khan et al; 2021). Thus, the sharp decline in Pakistan's Rice Export Sector is a result of structural inefficiencies and intense competition in the global market, which means there must be extensive and transformative policy and institutional reforms to make Pakistan's Rice Export Sector competitive again.

5.1. Practical/Managerial Implications.

The recommendations of this study assist in improving the performance and competitiveness of the rice export sector of Pakistan and provide insights for policymakers, exporters, and farmers. The government must first focus on stabilising the macroeconomy; this includes managing the volatility of the foreign exchange market and providing affordable financing for exports. Additionally, the government must reinstate targeted export incentives for rice exporters so that they can compete with regional rivals (Choudhary & Shah, 2025). With a strengthened trade facilitation framework, simplified documentation, and timely export refunds, the government will be able to lower transaction costs and increase responsiveness to the market (Akhtar et al., 2024). Furthermore, the government must build climate-resilient agricultural infrastructure, such as adaptive irrigation, flood mitigation, and subsidised crop insurance, to protect producers from environmental shocks that compromise yield and quality (Asghar et al., 2021). For exporters, practical measures include the adoption of contemporary quality control and processing technologies, the acquisition of international certifications (e.g., ISO, HACCP), and the establishment of traceability mechanisms to meet the sanitary and phytosanitary (SPS) standards of global buyers (Ghauri et al., 2020). Exporters will also need to establish strategic partnerships with logistics providers to streamline supply chains, minimise post-harvest losses, and improve their delivery performance to international markets (Tandra & Suroso, 2023). Integrating farmers, as vital stakeholders in the value chain, with exporters will also be enhanced through contract farming; this includes farming practices and crop husbandry techniques that are export quality, as well as the provision of premium inputs, such as seed, fertiliser, and pest control services secure uniformity in yield and quality (Khan et al., 2023). These actionable steps, with the coordination of the government, exporters, and farmers, pragmatically focus on reinforcing the structural pillars



of the rice export industry in Pakistan, addressing the domestic inefficiencies, global market competitive challenges, and re-establishing the international rice market competitive edge for the country (Ravi Kumar et al., 2024).

5.3. Limitations and Avenue for Further Studies

Although this study sheds light on the causes of the decline of rice exports from Pakistan, there are some limitations to be considered. First of all, since we relied on purposive sampling and interviewed a restricted number of participants, the findings may not be generalizable to the rice export sector as a whole because certain viewpoints and/or perspectives may not have been captured, including those from certain regions (Hussain et al., 2020). Secondly, although richly contextual, the focus on qualitative data does not allow us to examine and assign any weight to the determinants, nor does it tell us the extent of the impact on export performance (Mustafa & Hussain, 2023). Thirdly, and the most importantly, the interrelated and constantly changing global markets, global climate (which will continue to impact all aspects and relations, including those described in the findings), and ever-changing policies are important elements which will most certainly alter the present findings (Moazzam et al., 2025). It will be up to future scholars to consider and adapt such structural changes and include a quantitative element to the qualitative data (such as through a quasi-experimental model) in order to determine the weight of individual components in the decline in exports in order to address such limitations. Furthermore, it would be beneficial to examine changes over time through the use of a longitudinal approach in order to gain an understanding of the evolving relationships created by structural, institutional, and market factors and how they relate to rice export volatility. Policy and operational refinements could also be gained from comparative studies involving competitor countries like India, Vietnam, and Thailand. Additionally, broadening the geography and stakeholders could improve the findings' generalizability and applicability (Islam et al., 2024).

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