Export Barriers in Pakistan: Results of a Firm-Level Survey

Rashid Amjad and Ejaz Ghani and Musleh ud Din and Tariq Mahmood

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Rashid Amjad*, Ejaz Ghani**, Musleh ud Din*** and Tariq Mahmood****

Abstract

This study attempts to evaluate exporters’ perceptions of the problems they face in exploiting their full competitive potential in the international market. Using firm-level survey data, we find that a shortage of skilled labor, the energy crisis, institutional rigidities, market imperfections, and weaknesses in physical infrastructure are the key impediments to achieving export competitiveness. Policies geared toward improving the quality of skilled labor, resolving the energy crisis, and reducing transaction costs by improving the institutional and physical infrastructure are key to expanding Pakistan’s exports on a sustained basis.

Keywords: Pakistan, export competitiveness, exporting procedures, certifications


1. Introduction

At a time when many developing countries are rapidly expanding their exports, Pakistan continues to struggle to accelerate the export of manufactured goods. It is generally believed that the country’s exports are not competitive in international markets and that Pakistan is, therefore, unable to expand its market share. In particular, firms often complain of the lack of an investment-conducive climate, which impedes business expansion and exports. Against this backdrop, the objective of this study is to carry out a systematic investigation of firms’ perceptions of the barriers to exports in various productive sectors of the economy, as well as to suggest possible remedies. This analysis is based on a survey of exporters based in Lahore, complemented by a study of the determinants of export performance at the macro-level.

* Vice-Chancellor, Pakistan Institute of Development Economics, Islamabad.
** Chief of Research, Pakistan Institute of Development Economics, Islamabad.
*** Joint Director, Pakistan Institute of Development Economics, Islamabad.
**** Senior Research Economist, Pakistan Institute of Development Economics, Islamabad.
The study’s conceptual framework is built around the notion of competitiveness, defined as “the set of institutions, policies, and factors that determine the level of productivity of a country” (World Economic Forum, 2009). Thus defined, competitiveness becomes a function of the domestic institutional and policy environment as well as circumstances prevailing in the global market. In the last three decades, the environment for exporters has changed drastically on both these fronts. In most of the world, the reforms undertaken during the 1980s and later have curtailed government interventions in markets and reduced many forms of trade barriers. This has created a general atmosphere favorable to business activities, competitiveness, and growth.

A substantial body of empirical work has identified factors in domestic and foreign markets that promote or hinder export activities at the micro- and macro-level (see, for example, Aaby & Slater, 1989; Belloc & Di Maiob, 2011; Madsen, 1987; Zou & Stan, 1998). Studies on Pakistan have analyzed export performance at the macro- as well as micro-level. Akbar and Naqvi (2001) analyze the determinants of export performance at the country level; Masakure, Henson, and Cranfield (2009), and Din, Ghani, and Mahmood (2009) take up these issues at the firm level.

There is also a body of empirical literature that emphasizes introspection on the part of firms regarding internal and external problems as an element in assessing the hindrances that exporters face. These studies add firms’ perceptions as an important ingredient to their models. Admittedly, perceptions can deeply be influenced by firms’ own capabilities and internal circumstances. However, since entrepreneurs are keenly aware of the environment in which they operate, one can safely assume that there is a positive correlation between actual problems and those perceived by the firm as problems. Viewed this way, firms’ perceptions can greatly facilitate our understanding of the actual problems they face.

Some researchers analyze the difference between the perceptions of exporting and nonexporting firms as a tool to empirically investigate the constraints to export. For a sample of small exporting and nonexporting US firms, Yaparak (1985) finds that exporters and nonexporters have different perceptions about export barriers. Ahmed, Julian, and Majar (2005), however, find no significant differences in the perceptions of Malaysian exporters and nonexporters concerning different export barriers. Other studies focus on the managerial perceptions of exporting firms alone. For example, Axinn (1988) analyzes how managerial perceptions influence the export performance of machine tool manufacturers in the US and Canada.
Specifically, she considers exporters’ perceptions of the benefits of exporting rather than selling in the domestic market. She finds that perceptions of the complexities associated with exporting and managers’ work experience in foreign countries are related to the percentage of exports relative to firms’ total sales.

Khorana, Verousis, and Perdikis (2010) focus on small and medium firms in India. Their study evaluates exporters’ perceptions of the problems they face in the EU market. The study covers the leather, footwear, and textile and clothing sectors, and broadly categorizes export problems as either external-foreign or internal-foreign. The first includes customs valuation and clearances, administrative and documentary formalities, foreign regulations and standards, etc. The second problem originates mainly from firms’ organizational structure. The study’s results show that the problems of exporting firms are largely external-foreign.

Siringoringo, Prihandoko, Tintri, and Kowanda (2009) identify and analyze the problems faced by Indonesian exporters in small and medium enterprises (SMEs). They use data collected through a questionnaire designed to assess the problems perceived by SME owners/managers. These include bureaucracy, product quality, export procedures, lack of promotion, and competition. Respondents were asked to rank their problems from 1 to 5 on a Likert scale. The findings suggest that export barriers are due mainly to inadequate training/information as well as impediments from government authorities and agencies. The authors recommend equipping SMEs’ management with training and information to overcome these obstacles.

Our study is in line with the empirical work described above. The main objective is to evaluate exporters’ perceptions of the problems they face in exploiting their full competitive potential in export markets. In addition, the study suggests policies that might be required to ensure that Pakistan’s exporters are able to take full advantage of the increased market access brought about by the new trading environment. We hope that the recommendations that follow from this analysis help enhance the export competitiveness of Pakistan’s manufacturers.

The rest of the study is organized as follows. Section 2 sets out the conceptual framework that helps identify the core issues, and spells out the salient features of the questionnaire used in the survey. Section 3 discusses the main findings of the survey, while Section 4 concludes the discussion.
2. Conceptual Framework

Export competitiveness is a complex issue. The factors that affect export competitiveness vary over time, and across sectors and geography. To keep the analysis manageable, we identify some common features that generally help improve the business environment by reducing risks, costs, and time, thus motivating entrepreneurs to invest more in terms of money and effort. The major constraints to creating a good business environment are categorized under:

- Lack of trained labor
- Financial inputs
- Energy
- Physical infrastructure
- Bureaucratic hurdles
- Institutional rigidities

This broadly classifies the obstacles that manufacturers/exporters face in most instances, but these obstacles do not affect all sectors uniformly. As pointed out in Section 1, we adopt an indirect approach to assess how these factors can impact business performance. We have relied on respondents’ judgments regarding the intensity of the obstacle, having asked them to rank each issue according to their perception of its severity. We then use the rankings to provide a general assessment of the incidence by sector of these obstacles.

2.1. The Survey and Questionnaire

The study is based on a survey prepared jointly by the Lahore Chamber of Commerce and Industry and the Pakistan Institute of Development Economics. A purposive sampling approach was used to cover 40 firms/companies in the following sectors: textiles, garments, food processing, cement, chemicals, hosiery/bed linen, automobiles, and construction materials. The questionnaire comprised the major components described below (see Appendix 3 for the detailed questionnaire).

2.1.1. Firm-Specific Characteristics

This section covers firm-specific characteristics such as major activity, location, and quantitative information on the firm’s human resources. Such information provides insights into how firm-specific
characteristics can influence the firm’s perception of different issues. Information on the number of workers employed makes it possible to classify the firm by size.

2.1.2. Activities and Problems Currently Faced in Exporting

Although the World Bank’s world trade index emphasizes procedural requirements for exporting goods, it was not possible to prepare a similar index. Instead, firms were asked to indicate their perception of the activities and problems they currently faced in exporting. These activities included pre-shipment activities, inland carriage and handling, customs clearance and release, and international carriage and handling.

2.1.3. System of Certification

Many international standards have been developed to ensure quality and a guarantee that goods are produced under satisfactory social and environmental conditions. In our survey, firms were asked to indicate their awareness of these standards. They were also asked whether they were certified to these standards or if such a system was currently being developed or planned. The survey included the following standards (see Appendix 1):

- International Organization for Standardization (ISO) 9000
- ISO 14000
- Hazard Analysis and Critical Control Point (HACCP)
- Social Accountability Standard (SA) 8000
- Occupational Health and Safety Standards (OHSAS)
- EurepGAP
- Traceability

2.1.4. WTO-Related Agreements and Negotiations

Most of the World Trade Organization (WTO)’s agreements came into force in early 1995. However, there are wide differences in how different exporting companies reacted toward these agreements. Some companies were quick to respond and promptly engaged in active negotiations, either directly or through umbrella organizations, to draw the full benefits of the WTO arrangements. Many other companies, however,
lagged behind in such activities and, consequently, encountered serious obstacles in meeting the criteria set out in these agreements.

The study’s questionnaire asked firms to state their position with respect to the following agreements (see Appendix 2):

- Agreement on Technical Barriers to Trade
- Agreement on Sanitary and Phyto-Sanitary Measures
- Agreement on Pre-Shipment Inspection
- Agreement on Intellectual Property Rights

2.1.5. *Shipping and Logistics*

Shipping and logistics includes a wide range of areas, such as customs performance, physical infrastructure, inland transport, and efficiency in cargo handling. Their smooth functioning helps provide goods and services on time and at a lower cost. Firms’ perceptions of these issues can identify important bottlenecks. The survey also sought firms’ suggestions for improving the trade logistics environment.

2.1.6. *Major Sociopolitical Hindrances*

Sociopolitical hindrances pertain to general obstacles that adversely affect the working environment. The survey identified the following constraints and asked for firms’ perceptions of them:

- Corruption
- Injustice
- Bribery
- Political interference
- Terrorism
- Lack of infrastructure
- Market imperfections

Most responses to various issues and obstacles are ranked on a Likert scale of 1 to 6, depending on the nature of the problem. This enables us to cluster responses at specific ranks, as shown in Table 1.
Table 1: Countries ranked by competitive industrial performance index

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Pakistan</td>
<td>66</td>
<td>67</td>
<td>63</td>
</tr>
<tr>
<td>Singapore</td>
<td>1</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>China</td>
<td>31</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>India</td>
<td>51</td>
<td>42</td>
<td>42</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>76</td>
<td>75</td>
<td>69</td>
</tr>
<tr>
<td>Iran</td>
<td>98</td>
<td>82</td>
<td>83</td>
</tr>
<tr>
<td>Nepal</td>
<td>97</td>
<td>91</td>
<td>94</td>
</tr>
<tr>
<td>Indonesia</td>
<td>38</td>
<td>40</td>
<td>43</td>
</tr>
<tr>
<td>Malaysia</td>
<td>13</td>
<td>20</td>
<td>27</td>
</tr>
<tr>
<td>Thailand</td>
<td>26</td>
<td>27</td>
<td>25</td>
</tr>
</tbody>
</table>


Various measures taken to create a business friendly environment have also had an impact. Within the South Asian Association for Regional Cooperation (SAARC) region, Pakistan ranks higher than India, Bangladesh, Nepal, and Bhutan in terms of ease of doing business (Table 2).

Table 2: Economies ranked by ease of doing business

<table>
<thead>
<tr>
<th>Country</th>
<th>2007</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singapore</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Maldives</td>
<td>53</td>
<td>79</td>
</tr>
<tr>
<td>Pakistan</td>
<td>74</td>
<td>105</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>88</td>
<td>122</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>89</td>
<td>89</td>
</tr>
<tr>
<td>Nepal</td>
<td>100</td>
<td>107</td>
</tr>
<tr>
<td>India</td>
<td>134</td>
<td>132</td>
</tr>
<tr>
<td>Bhutan</td>
<td>138</td>
<td>142</td>
</tr>
<tr>
<td>Afghanistan</td>
<td>162</td>
<td>160</td>
</tr>
</tbody>
</table>

3. Key Findings of the Survey

Firms’ General Characteristics

Based on the number of workers, 38 percent of the firms surveyed were large-scale enterprises employing 300 workers or more. Twenty-four percent were medium firms employing 101 to 300 workers. The proportion of small firms with up to 100 workers was 38 percent.

Seventy-five percent of the firms surveyed were involved in manufacturing, and 20 percent in trading. Only 2 percent were multinational companies, while 2 percent were involved in other activities.

Textile firms comprised the highest percentage (21 percent) of total firms surveyed, followed by food industries (15 percent), garments (13 percent), and cement (10 percent). Firms engaged in chemicals, hosiery/bed linen, general imports, automobiles, and construction materials each accounted for 5 percent; 15 percent were engaged in other activities.

General importers and cement firms employed the highest percentage of skilled labor, while chemical and textile firms employed the lowest percentage.

Reasons for Shortage of Skilled Labor

Lack of institutional training was the most frequently reported reason for the shortage of skilled labor (35 percent of firms), followed by the low quality of education (30 percent).

Reduction in Cost if Labor Becomes Productive

If high levels of labor productivity are achieved, it can reduce a firm’s costs. However, firms have different perceptions of the extent of this cost reduction. The highest percentage (35.5 percent) said that costs would fall by 1–10 percent, 29.1 percent said they would fall by 11–20 percent; and 12.9 percent said that costs would remain unaffected.

Duration of Finance

The majority of firms (60 percent) appeared to use short-term financing, implying that most of them use it for working capital needs.
Firms using medium-term and long-term finance accounted for 4 and 36 percent, respectively.

**Importance of Location**

A firm’s location has an important bearing on its capacity to produce and export. The cheap availability of inputs, good infrastructure, high demand for output, and availability of skilled labor are important factors when deciding where to locate a firm. The survey’s figures showed that high demand for output (34 percent) and availability of skilled labor (27 percent) were the most frequently cited reasons for choosing a particular location. Cheap availability of inputs (21 percent), when added to availability of skilled labor, indicates that inputs played a more important role in deciding a firm’s location.

**Fuel (Electricity and Gas) as a Percentage of Total Cost**

Fuel as a percentage of total cost was highest for cement-producing firms (35 percent), and lowest for garments and automobiles (2.17 and 2.6 percent, respectively).

**Problems Related to Electric Supply**

Frequent load-shedding and power failures seriously affect industrial performance in Pakistan. Some firms have tried to solve this problem by using electricity generators and UPS. The survey showed that about 23 percent of firms used a UPS and 38 percent used generators to meet their electricity requirements.

**Activities and Problems Related to Exporting**

**Pre-Shipment Activities**

The percentage distribution of the level of satisfaction with procedures and sub-activities shows that it is lowest (100 percent are not satisfied) for the procedure labeled “Prepare freight forwarding instructions and other documents required for the transfer of cargo to port of departure.” About 62.5 percent of firms were satisfied with the procedure labeled “Secure letter of credit.”
Inland Carriage and Handling

Firms satisfied with the procedures labeled “Load cargo on local carriage” and “Arrange a deposit for terminal handling charges” accounted for the highest percentage—57.1 and 63.6 percent, respectively. The highest percentage of firms not satisfied (33.3 percent) occurred in the case of the procedure, “Deliver cargo to port of departure.”

Customs Clearance

In customs clearance activities, the percentage of satisfied firms is highest for “Inspection for technical standard” (62.5 percent). The highest percentage of firms not satisfied is 23.1 percent for “Physical inspection of good to determine if it complies with technical or sanitary or phytosanitary standards.”

Customs Release

Two important activities arise in customs release:

- Discharge of cargo from terminal to export
- Arrangement of payment for terminal handling charges

Here, the level of satisfaction was found to be quite high—only 6.7 and 7.7 percent of firms, respectively, reported being unsatisfied with these procedures. This indicates that the reforms introduced in the last few years to streamline customs procedures are paying off.

International Carriage and Handling

Firms were asked to report their perceived degree of satisfaction with the following procedures:

- Examination of documents to prove that regulatory procedures have been met
- Cargo loading at port of departure
- Transport of goods to final destination
- Arrangement of payment for international freight charges

The highest percentage of satisfied firms was reported for the procedure labeled “Transport goods to final destination” (58.3 percent).
The percentage of “not satisfied” firms was highest in the case of the procedure, “Load cargo at departure port.”

System of Certification

The Pakistan government has increased support for various quality, environmental, and social certifications when a manufacturing unit obtains four of the specified standards (see Pakistan, Ministry of Commerce, 2009, p. 45). However, exporters’ low levels of awareness of these systems make such measures practically ineffective. The percentage of firms who were aware of these systems of certification was highest in the case of the ISO 9000 and ISO 14000, which is not as high as it should be. Only 40.5 percent of firms were completely aware of the ISO 9000 and 25 percent of the ISO 14000. Fifty-five percent—the highest proportion—were unaware of the EurepGAP.

Certification to Standards/ Preparation for certification

Another issue that has affected exporters in Pakistan involves the WTO-prescribed standards and norms relating to quality certification, and adherence to health, labor, and environment standards. These have posed a significant challenge to firms in developing countries such as Pakistan. The survey’s results showed that the highest percentage of firms is certified to the ISO 9000 (66.7 percent). EurepGAP and traceability are the standards least complied with (7.7 and 5.1 percent, respectively).

Agreements and Negotiations

Questions about firms’ awareness of different trade agreements and negotiations showed that 57.6 percent of firms were aware of the Agreement on Technical Barriers to Trade. There was minimal awareness of the Agreement on Sanitary and Phyto-Sanitary Measures.

Effect of Agreements on Business

How do firms perceive the effect of trade agreements and negotiations on their business? To assess this, firms were asked to rank their perception from “don’t know” to “very positive.” The responses show that most firms (57.6 percent) regarded the Agreement on Pre-Shipment Inspection as being very negative. About one third were not clear about most of the agreements and negotiations. Only a small percentage (about 10 percent) had any positive perception of these agreements.
Perception of Ongoing Dialogues

Firms were asked about dialogues/consultations between their business, or sector representatives/umbrella organizations and ministries in charge of negotiating the rules-based multilateral trading system at the WTO level. The responses show that about 40–45 percent of firms perceived these dialogues as “average.” In the case of sanitary and phyto-sanitary arrangements, 27.2 percent were not even aware that such a dialogue was taking place.

Use of Transportation Mode for Shipment

The major mode of transport recorded was roads, except for general importers, whose use of railways accounted for about 57.5 percent. Chemical firms accounted for the maximum use of roads (100 percent), while the auto industry was the biggest user of air transport (52.5 percent).

Perception of Efficiency of Institutions

Most firms (about 54 percent) believed that banks and chambers of commerce were “efficient,” while 37.5 and 28.6 percent reported provincial authorities and the Trade Development Authority of Pakistan, respectively, as being “not efficient.”

Effect of Hindrances on Firms’ Cost

Terrorism and lack of infrastructure were ranked as “highly significant” by 27.3 and 25 percent of the firms surveyed. Corruption was ranked as “slightly significant” by 40 percent, and political interference was ranked as “not significant” by 42.4 percent.

Reasons for Failure of Business

About 69.2 and 64.1 percent of firms, respectively, perceived poor planning and weak government policy as the major factors responsible for business failure.

Quality of Trade Logistics

About 40 to 58 percent of firms regarded the quality of trade logistics as a support for business with respect to saving costs, reducing inventory, improving efficiency, and increasing consumer satisfaction.
Major Constraints to Improving Trade Logistics Environment

The survey sought firms’ opinions on the following constraints to improving the trade logistics environment:

- Many agencies involved
- Many documents required
- Slow processing of customs clearance
- Poor land, road, or rail infrastructure
- Poor transportation service

About 38.2 percent of firms reported “poor land, road, or rail infrastructure” as a “major obstacle” to improving the trade logistics environment.

Perception of Policy Recommendations

The ranking of the proposed solutions shows that there is much optimism about the effectiveness of various policy options. Almost half the firms perceived these options as being very important.

Reductions in Cost if Proposed Solutions are Implemented

More than 40 percent of firms anticipated an 11–20 percent fall in cost if the solutions listed above were to be implemented.

Regional Distribution as Destination of Exports

The distribution of exports by region shows that more than 50 percent of average exports go to South Asia. The major destinations of exports with respect to the number of firms surveyed were the EU and East Asia (27.1 and 25.4 percent, respectively).

4. Summary and Conclusions

This study has attempted to analyze firms’ perceptions of the various obstacles that hinder export performance in Pakistan. Using the survey data, we have found that firms’ responses cluster around specific responses. This indicates the importance of those specific issues, implying that they merit the immediate attention of the government and industrial groups.
The shortage of skilled labor is more severe in textiles, chemicals, and hosiery/bed linen. Firms regard inadequate institutional training and the low quality of education as the most important reasons for the lack of labor skills. Most firms believe that, if skilled labor were to become available, they would be able to reduce their costs and thus enhance their competitiveness. In terms of location decisions, the availability of various inputs plays a more decisive role than the presence of an output market.

Most firms did not report availing long-term credit. Whether this is due to demand-side or supply-side problems is an issue that requires further research. It also indicates that firms seek financing primarily for their working capital needs. If this was streamlined, it could lower firms’ transaction costs. Fuel costs also put a heavy burden on firms and can adversely affect their competitiveness. The availability of cheap fuel, especially electricity, is essential to boost exports.

Quality certification and adherence to health, labor, and environment standards is still a problem for exporters. There is an urgent need to increase awareness of these standards, and to simplify procedures to avail the facilities provided in this regard. While Pakistan has set up the necessary institutional arrangements for certification, implementation remains limited mainly because exporters are not aware of these standards in the first place. Raising their level of awareness can result in significant gains in certification and quality improvements.

Features commonly perceived by firms as hurdles to export competitiveness include institutional rigidities, market imperfections, weaknesses in physical infrastructure, and the lack of a general business environment. It is therefore essential that such constraints are removed so that an environment conducive to business is created for exporters of manufactured goods. It goes without saying that energy shortages are a binding constraint to manufactured exports and that there is an urgent need to resolve energy-related issues.
References


Appendix 1

Commonly Used Standards

International Organization for Standardization (ISO)

The ISO is an international nongovernment body that was established in 1947. It has 158 member countries and is headquartered in Geneva, Switzerland. The ISO promulgates worldwide industrial and commercial standards, among which the ISO 9000 and ISO 14000 are the most well known. The ISO 9000 family addresses quality management, while the ISO 14000 family addresses environmental management.

EurepGAP

EurepGAP was created in the late 1990s by several European supermarket chains and their major suppliers as a common standard for farm management practice. GAP is an acronym for good agricultural practices. Its objective was to bring conformity to different retailers’ supplier standards, and it has now become the world’s most widely implemented farm certification standard. Most European customers now require EurepGAP certification as a prerequisite for doing business in agricultural products.

Hazard Analysis and Critical Control Point (HACCP)

HACCP was conceived in the 1960s when the US National Aeronautics and Space Administration (NASA) felt the need to design and manufacture foods for space flights. Later, it was used as a systematic preventive approach to food safety and pharmaceutical safety. HACCP is now used in the food industry to identify potential food safety hazards. HACCP principles are also included in the ISO 22000.

Social Accountability Standard (SA 8000)

The SA 8000 is a standard for decent working conditions, developed and overseen by Social Accountability International. It covers issues such as child labor, forced labor, freedom of association, discrimination, and worker health and safety.
Occupational Health and Safety Standards (OHSAS)

The OHSAS system was developed in January 2000 for organizations to meet their health and safety obligations in an efficient manner. It is the most widely recognized standard on occupational health and safety management. The system enables organizations to identify problems and take appropriate measures to reduce occupational hazards.

Traceability

Traceability refers to the completeness of information about every step in a process through all stages of production, processing, and distribution. Traceability enables firms to verify the history, location, or application of an item by means of documented information. A host of benefits is associated with this standard, e.g., it makes recalls possible in the case of automobiles, it helps ensure safety in food items, and it helps identify counterfeit goods in manufacturing industries. The EPC global Software Certification Program provides information on certified products and the vendors who develop them. The Trade Control and Expert System (TRACES) helps manage the import and export of live animals and animal products to and from the EU.
Appendix 2

WTO Agreements

Agreement on Technical Barriers to Trade

This agreement tries to ensure that regulations, standards, testing, and certification procedures do not create unnecessary obstacles. However, it gives member countries the right to take measures that may be regarded necessary for the protection of human health and safety, or the environment. The agreement came into force with the establishment of the WTO at the beginning of 1995.

Agreement on Sanitary and Phyto-Sanitary Measures

This agreement was negotiated during the Uruguay Round of the General Agreement on Tariffs and Trade. It commits member countries to enforce certain measure to protect public health. These measures are based on internationally established guidelines and risk assessment procedures. Like the Agreement on Technical Barriers to Trade, this agreement also came into force with the establishment of the WTO at the beginning of 1995.

Agreement on Pre-Shipment Inspection

Pre-shipment inspections are customarily carried out at the place of origin. Their objective is to ensure that the type, quality, price, and customs valuation of goods are as claimed. These inspections are usually performed by authorized private organizations. The Agreement on Pre-Shipment Inspection ensures that this inspection process does not create unnecessary delays or discriminatory treatment. The agreement came into force on 1 January 1995.

Agreement on Intellectual Property Rights

The WTO’s Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) attempts to bring these rights under common international rules. Like other WTO agreements, the Agreement on Intellectual Property Rights took effect on 1 January 1995. However, the time frame for full implementation varied across countries. Developed countries were given one year to implement the agreement. Developing countries were initially given 11 years, but later this period was extended to 2013.
Appendix 3

Questionnaire

This questionnaire is divided into six sections. The first section asks about the characteristics of the sample firms. Technical efficiencies and cost information issues are included in the second and third sections. The fourth section assesses information about trade logistics. Queries about hindrances to market access are included in the fifth section. The last section asks for firms’ suggestions for policy recommendations.

1. Firm/Company’s Characteristics

Q1. What is the nature of business of the firm/company?

□ Manufacturing  □ Trading  □ Multinational company
□ Other, please specify: ...........................................

Q2. What is the location of the firm/company? Why is this location important from the business point of view?

Location .............................................

□ Cheap availability of inputs  □ High demand for output

□ Good infrastructure  □ Others

□ Availability of skilled labor

Q3. Please indicate the number of people currently employed (full-time and part-time) by your firm.

<table>
<thead>
<tr>
<th>Regular Employees</th>
<th>Part-time Employees</th>
</tr>
</thead>
</table>

Q4. What is the current percentage (%) of domestic demand and export share of the firm’s product in total output or production?

<table>
<thead>
<tr>
<th>Domestic demand %</th>
<th>Exports as % of total output</th>
</tr>
</thead>
</table>


2. Firm/Company’s Technical Efficiency

Q5. What is the current share of skilled (professionals) and unskilled workers in total number of employees?

Q6. Provide details on the leading sources of machinery imports and what type of machinery/technology your firm/company imports.

Source 1: Region ................. Type of technology.................
Source 2: Region ................. Type of technology.................
Source 3: Region ................. Type of technology.................

3. Cost information

Q7. Provide information about the capital structure used. Also mention percentage of each mode.

☐ Self-financed .............% value
☐ Debt-financed .............% value
☐ Equity-financed .............% value

Q8. What is the percentage (%) of total cost for fuel, gas, water, and electricity?

☐ Cost of fuel as % of total cost .................
☐ Cost of electricity as % of total cost .................
☐ Cost of gas as % of total cost .................
☐ Cost of water as % of total cost .................
4. Activities and Problems in Exporting

Q9. Please fill in the following table

<table>
<thead>
<tr>
<th>Procedures and Sub-activities</th>
<th>Time/Days Consumed</th>
<th>Costs (please specify currency unit)</th>
<th>Name of Agency Involved</th>
<th>Degree of Satisfaction (Rate from 1 to 4) as given in key</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-shipment activities</td>
<td></td>
<td>Avg. Max.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conclude sales contract</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secure letter of credit (L/C)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Packing of goods</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prepare freight forwarding instruction and other documents required for the transfer of cargo to port of departure</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prepare documents for export</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arrange international freight</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perform pre-shipment inspection,</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arrange payment for pre-shipment inspection</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inland carriage and handling</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Load cargo on local carriage</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deliver cargo to port of departure</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wait for customs clearance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arrange a deposit for terminal handling charges</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customs clearance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Procedures and Sub-activities</td>
<td>Time/Days Consumed</td>
<td>Costs (please specify currency unit)</td>
<td>Name of Agency Involved</td>
<td>Degree of Satisfaction (Rate from 1 to 4) as given in key</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>--------------------</td>
<td>--------------------------------------</td>
<td>-------------------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>Request for clearance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Examination of mandatory documents</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical inspection of goods</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical inspection of goods to determine if it complies with technical or sanitary or phyto-sanitary standards</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arrange payment for export taxes, tariff, and duties</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arrange payment for technical control charges</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customs release</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discharge cargo from terminal to export</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arrange a payment for terminal handling charges</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>International carriage and handling</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Examine documents to prove that regulatory procedures are met</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Load cargo at port of departure</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transport goods to final destination</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arrange a payment for international freight charges</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Key for Rating:

1 = Highly Satisfied, 2 = Satisfied, 3 = Somewhat Satisfied, 4 = Not Satisfied

5. System of Certification

Q10. What is your awareness of the following standard? (Please circle)

<table>
<thead>
<tr>
<th>Standard</th>
<th>Fully unaware</th>
<th>Unaware</th>
<th>Averagely Aware</th>
<th>Aware</th>
<th>Fully Aware</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISO9000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ISO14000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HACCP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SA8000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OHSAS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EUREPGAP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Traceability</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Q11. Please indicate if your company is already certified to the following standards or if the system is currently being developed/planning on being developed (please tick).

<table>
<thead>
<tr>
<th>Standard</th>
<th>Company Certified to System</th>
<th>System being developed / planning on being developed</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISO9000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ISO14000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HACCP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SA8000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OHSAS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EUREPGAP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Traceability</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6. Agreement and Negotiations

(a) Are you aware of the following WTO agreements? (Please tick)

<table>
<thead>
<tr>
<th>Agreement</th>
<th>Fully unaware</th>
<th>Unaware</th>
<th>Averagely Aware</th>
<th>Aware</th>
<th>Fully Aware</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agreement on Technical Barriers to Trade (TBT)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agreement on Sanitary and Phyto-Sanitary</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agreement on Pre-Shipment Inspection (PSI)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agreement on Intellectual Property Rights</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
(b) How these agreements affect your business?

<table>
<thead>
<tr>
<th>Agreement on Technical Barriers to Trade (TBT)</th>
<th>Don't Know</th>
<th>Very Negative</th>
<th>Negative</th>
<th>Neither Negative nor Positive</th>
<th>Positive</th>
<th>Very Positive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agreement on Sanitary and Phyto-Sanitary Measures</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agreement on Pre-Shipment Inspection (PSI)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agreement on Intellectual Property Rights</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(C) How much dialogue/consultation is there between your enterprise, or your sector representatives/umbrella organization and the ministries in charge of negotiating the rules-based multilateral trading system at the WTO level? Please tick.

<table>
<thead>
<tr>
<th>Agreement on Technical Barriers to Trade (TBT)</th>
<th>Don't Know</th>
<th>No Dialogue</th>
<th>Weak Dialogue</th>
<th>Average Dialogue</th>
<th>Strong Dialogue</th>
<th>Very Strong Dialogue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agreement on Sanitary and Phyto-Sanitary Measures</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agreement on Pre-Shipment Inspection (PSI)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agreement on Intellectual Property Rights</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
7. Shipping and Logistics

Inland transport:

Q13. What type of transportation mode is your company using for inland transportation? Also mention time for shipment.

1. □ Railways
2. □ Airways
3. □ Roads

<table>
<thead>
<tr>
<th>Option</th>
<th>Selects</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Own transportation services</td>
<td>[ ]</td>
<td>[ ] days</td>
</tr>
<tr>
<td>Public transportation</td>
<td>[ ]</td>
<td>[ ] days</td>
</tr>
<tr>
<td>Private transportation</td>
<td>[ ]</td>
<td>[ ] days</td>
</tr>
</tbody>
</table>

What is the ton/km cost? Rs. ________

What is the total cost in Pak rupee? Rs. ________

Is this mode of transportation easily available? □ Yes □ No

Is it reliable? □ Yes □ No

What is the total cost of loading and unloading? Rs. ________

Loading and unloading

Are loading facilities provided by you or not? □ Yes □ No

Are unloading facilities provided by you or not? □ Yes □ No

Total transportation cost

Below give information regarding cost of different processes of inland transportation and time required for completion of these processes.

<table>
<thead>
<tr>
<th>Process</th>
<th>Cost (Rs)</th>
<th>Total time (Days)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Documentation</td>
<td>Rs. ________</td>
<td>[ ] Days</td>
</tr>
<tr>
<td>Traveling</td>
<td>Rs. ________</td>
<td>[ ] Days</td>
</tr>
</tbody>
</table>
Loading  Rs. _________  [ ] Days
Unloading  Rs. _________  [ ] Days
Clearance  Rs. _________  [ ] Days

Total cost and time required for the completion of whole process
Rs. _________  [ ] Days

8. Labor

Q14. Is labor with required skills available?  □ Yes  □ No

In case of shortage of skilled labor, specify the reasons

□ Low quality education  □ Lack of training staff
□ Lack of training institutions  □ Low Salary

If any other, then please specify: ________________________________

Q15. If the optimum level of labor productivity is achieved, then how much it will reduce firm’s cost?

□ 01–10 % □ 11–20 % □ 21–30 % □ 31–40 % □ No Effect

Q16. What type of backup is used to maintain consistent electric supply and what is the total cost of maintaining such equipment?

(Maintenance cost covers those cost which are required without use of this equipment)

Only mention corresponding type which firm uses

<table>
<thead>
<tr>
<th>Type of Backup</th>
<th>Cost of maintenance</th>
<th>Cost of usage (Rs) per month</th>
</tr>
</thead>
<tbody>
<tr>
<td>UPS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fuel generator</td>
<td></td>
<td></td>
</tr>
<tr>
<td>If other, mention</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Q17. If there is no backup for energy, then for how many hours do your workers not work, due to load shedding in a day?

_________Hours in a Day
Q18. Role of Institutions

Rank the efficiency of the following institutions

<table>
<thead>
<tr>
<th>Institution</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax Department</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Banks</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>TDAP</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Chamber of Commerce</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Provincial Authorities</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

Note (1 = highly efficient, 2 = efficient, 3 = slightly efficient, 4 = not efficient)

If the efficiency of institutions is improved, then how much it will reduce firm’s cost?

- 01---10 %
- 11---20 %
- 21---30 %
- 31---40 %
- No Effect

Q19. Major Hindrances

Rank the effect of following factors on your firm/company’s cost.

<table>
<thead>
<tr>
<th>Factor</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corruption</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Injustice</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Bribery</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Political interference</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Terrorism</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Lack of infrastructure</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Market imperfections</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

Note (1 = highly significant, 2 = significant, 3 = slightly significant, 4 = not significant)
Q20. Business Failure

What factors are responsible for failure of a business?

- □ Bad Planning
- □ Lack of Finance
- □ Poor Market Conditions
- □ Unfair Competition
- □ Bad Luck
- □ Lack of Advice
- □ Bad Government Policy
- □ No Rules and Regulations

Q21. Trade Logistics

To what extent do logistics affect your business regarding the following factors?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saving Cost</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reducing Inventory</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improving Efficiency</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumer Satisfaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note (1 = highly effective, 2 = effective, 3 = slightly effective, 4 = not effective)

What are the major constraints to the trade logistics environment?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Too many agencies are involved</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Too many documents required</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slow processing of customs clearance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor inland road or rail infrastructure</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor transportation service</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note (1 = no obstacle, 2 = minor obstacle, 3 = moderate obstacle, 4 = major obstacle)
Q22. Cost of Borrowing

Provide information about the capital structure used. Also mention percentage of each mode.

- Self-Financed Firm ____________ % value
- Debt Financed Firm ____________ % value
- Equity Financed Firm ____________ % value

Duration of finance:
- □ Short Term □ Medium Term □ Long Term
- Interest rate varies with time period □ Yes □ No

If yes what is the interest rate for different time period mention in %

- Short Term [ ] %  Medium Term [ ] %  Long Term [ ] %
- Interest rate paid annually or monthly □ annually □ monthly

Policy Recommendations

Rank the solution you think will be most effective for improving logistics environment.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronics processing of documents</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Coordination between concerned authorities</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>One-window operation</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Port infrastructure</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Eliminate corruption</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Inland transportation</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Easy mode of paying customs and port fees</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

Note (1 = no effect, 2 = minor importance, 3 = moderately important, 4 = very important)
If these solutions are implemented, how much it will reduce firm's cost?

☐ 01---10 % ☐ 11---20 % ☐ 21---30 % ☐ 31---40 % ☐ No Effect

To what extent is the role of the ministry of trade, export promotion bureau and other trade institutions helpful?

☐ not helpful ☐ helpful ☐ very helpful

If not helpful, then suggest how the role of these institutions can be improved?

Q23. Future Endeavors

Please share with us your future plans for the development of your business and also how to increase exports of your company.

____________________________________________________________________________________

____________________________________________________________________________________

____________________________________________________________________________________

____________________________________________________________________________________

In this regard, what help do you expect or ask for, from the government side?

____________________________________________________________________________________

____________________________________________________________________________________

____________________________________________________________________________________

____________________________________________________________________________________

Please give your valuable suggestions on how to increase the volume of Pakistani exports to the world.

____________________________________________________________________________________

____________________________________________________________________________________

____________________________________________________________________________________

____________________________________________________________________________________
Notes:

1. This questionnaire is part of a survey and joint study, conducted by Lahore Chamber of Commerce & Industry and Pakistan Institute of Development Economics (PIDE), to identify barriers to exports faced by export-oriented firms.

2. All the information and inputs provided in this questionnaire will be strictly considered and treated as confidential and will not be shared with others.

3. All questions asking for your comments and feedback are open-ended. Additional sheets of paper can be used to elaborate your point of view or answer.

4. Any other.