Pakistan: Business perspectives
Pakistan: Invisible barriers to trade

Business perspectives
About the paper

Upgrading quality infrastructure and enforcing quality compliance are key to Pakistan’s export development.

A survey of almost 1,200 companies on non-tariff measures found that more than half of Pakistani exporters face regulatory or procedural trade-related obstacles.

The report recommends strengthening the quality and customs infrastructure in Pakistan. Adopting digitally oriented solutions such as an integrated trade portal is essential to give necessary guidance to exporters.
Foreword by the International Trade Centre

Better integration with the global value chain and increased exports are important for Pakistan’s economic development through job creation – especially for youth and women. In fact, the country can potentially increase its exports by up to $12 billion by 2024 even taking into account disruptions caused due to COVID-19, according to the International Trade Centre’s latest export potential assessment for Pakistan.

As much as $7 billion of this untapped export potential is at risk, due to market frictions such as lack of transparency and related non-tariff measures, especially for small businesses looking to trade more across borders. Thus, identifying which non-tariff measures hinder Pakistani exports is critical for the Government to better formulate its trade policies.

Supporting small businesses to achieve export success also requires a clear understanding of the challenges they face. International Trade Centre business surveys on non-tariff measures aim to achieving exactly that – identifying key trade hurdles through direct interaction with businesses.

This report is based on a large-scale business survey of exporters and importers in Pakistan. It identifies the most challenging non-tariff measures that Pakistani businesses face. This gives policymakers insight into which policies, procedures and facilities must be strengthened to reduce trade costs and boost competitiveness.

More than half of the exporters in Pakistan face difficulties with restrictive regulations or related trade obstacles. Among these are difficulties complying with technical requirements, lack of trade-related information and inadequate domestic infrastructure.

Women entrepreneurs also face social constraints and a general lack of sufficient support in government agencies and business support institutions.

Market access begins at home. There is great scope for the Government of Pakistan to streamline processes, improve quality management and work with exporters to provide consistent, transparent and timely information. This report supports that process, by providing the business voice on nationally relevant priorities for competitiveness.

The International Trade Centre remains committed to supporting Pakistani small businesses to reach their potential by overcoming those obstacles. I hope this report will help forge a roadmap that leads to more inclusive and competitive trade policy.

The International Trade Centre has been pleased to work with the World Bank Group on this important project to support the Government of Pakistan.

Dorothy Tembo
Acting Executive Director
International Trade Centre
Foreword by the World Bank Group

Pakistan’s growth and development prospects are inextricably linked to its ability to better integrate into world markets. For Pakistan, increased exports and integration into global value chains means more and better jobs for its men and women.

Pakistan is at a crossroad. By its 100th birthday, it can become an upper-middle income economy and create better opportunities for its people. To make this possible, Pakistan needs to act now to embrace the global marketplace, jumping into a virtuous cycle of integration, job creation and sustainable growth. The right first step is to identify obstacles to trade and design a roadmap for their reduction.

Non-tariff measures – often imposed to protect human, animal or plant health, to ensure quality or inform consumers about production processes – can at times become obstacles to trade. Non-tariff measure compliance may become too onerous for firms, and the mere process of finding the right information can be cumbersome.

Taking stock of non-tariff measures affecting 1,152 Pakistani exporters and importers, this study – commissioned to the International Trade Centre – contributes to evidence-based policymaking in Pakistan.

Focusing on those non-tariff measures concerning exporters, the study identifies those – foreign or domestically imposed – that most affect exports and proposes a way forward. Conformity assessments associated with testing and product certification are considered demanding by almost half of exporters – not because of meeting the required criteria, but rather the high costs of proving it.

Providing information about what it takes to export a product to a given destination is very valuable for firms, particularly for new, small exporters, that lack the scale to invest in information searching. Digital trade portals, easily accessible to everyone regardless of location or gender, can be a step in making non-tariff measures more transparent, and compliance with them less costly.

The World Bank Group is glad to be collaborating with the International Trade Centre in its commitment to support the Government of Pakistan with efforts for a smart integration of its talent in the global economy.

Ilango Patchamuthu
Country Director for Pakistan
World Bank Group
Acknowledgements

The International Trade Centre (ITC) expresses its appreciation to the representatives of enterprises, business associations and institutions, and the experts who agreed to be interviewed and shared their experiences on regulatory and procedural trade obstacles.

Mohamed Tarek Issa and Samidh Shrestha wrote this report. Abdellatif Benzakri and Paula Andrea Castaneda Verano contributed to data quality control and provided statistical support. Rao Mehroz Khan provided research support.

ITC thanks Fayaz Rasool Maken (Federal Board of Revenue), Omer Mukhtar Tarar (Pakistan Council of Scientific and Industrial Research), Roubina Shah (formerly Ministry of Commerce) and Shahrukh Iftikhar (ABS & Co.) for their expertise and contributions to the report.

Samidh Shrestha managed the implementation of the business survey on non-tariff measures in Pakistan.

ITC acknowledges Gallup Pakistan, which conducted the interviews in Pakistan.

We thank the Ministry of Commerce of Pakistan for its trust and support throughout the project. We also express our gratitude to Nadia Rocha, Gonzalo Varela and the World Bank team in Pakistan for their guidance during survey implementation and feedback on the report.

The Non-Tariff Measures Business Survey in Pakistan was implemented as part of the ITC Programme on Non-Tariff Measures under the general supervision of Mondher Mimouni, Chief, ITC Trade and Market Analysis Section, and Ursula Hermelink, Manager of the ITC Programme on Non-Tariff Measures.

This report contributes to the development of a comprehensive Strategic Trade Policy Framework (STPF) under the Pakistan Trade and Investment Policy Program (PTIPP) – a collaborative effort among the Ministry of Commerce, the Australian Department of Foreign Affairs and Trade and the World Bank Group aimed at increasing Pakistan’s share in regional trade and investment.

Special thanks to Jennifer Freedman for editing and content support, and to the ITC publications team for production management and quality control.

ITC thanks the Australian Department of Foreign Affairs and Trade for their financial contribution.
Contents

About the paper  ii
Foreword by the International Trade Centre  iii
Foreword by the World Bank Group  iv
Acknowledgements  v
Acronyms  ix
Executive summary  x

Understanding non-tariff measures  1
A business survey on non-tariff measures  2
Pakistan’s economy: the big picture  3

CHAPTER 1  PROFILES OF SURVEYED COMPANIES  8

CHAPTER 2  THE COMPANY PERSPECTIVE  13
Common challenges  13
  Both foreign and local regulations are burdensome  15
  Proving compliance with technical requirements is hard  17
  Technical requirements are demanding  18
  Firms stumble over domestic regulations  19
  Procedures cause serious problems  22
  Business environment in Pakistan is challenging, but improving  23
Agricultural export challenges  25
  Fresh fruits and vegetables  28
  Live animals and meat products  29
  Rice  31
  Transport and documentation challenges are common  32
  Administrative procedures and high fees: The real problem for food exporters  32
Manufacturing export challenges  33
  Textiles and garments  36
  Surgical instruments  37
  Sports equipment  38
  Pharmaceutical products  38
  Manufacturing exporters face difficulties with rules of origin and other issues  38
  Procedures are the main burden for manufacturing exporters  38
Importers struggle most with non-technical measures  39
What are the challenges of women entrepreneurs?  41
Tables and figures

Table 1  Non-tariff measures affect Pakistani exports and imports 14
Table 2  Agricultural exports – non-tariff measures and why they are burdensome 27
Table 3  Manufactured exports – non-tariff measures and why they are burdensome 35
Table 4  Inspection bodies active in food and textile trade 54

Figure 1  Pakistan relies heavily on imports while its service sector continues to grow 3
Figure 2  EU is the biggest export market, textiles and cotton are the top exports 3
Figure 3  China and EU provide most Pakistani imports 4
Figure 4  EU offers the most duty-free access for Pakistani products 4
Figure 5  Clothing products and rice have the greatest export potential 5
Figure 6  United States, China and Germany are the most promising markets 5
Figure 7  Exporters in Pakistan, by sector and region 6
Figure 8  Pakistan and its Trade Facilitation Agreement commitments 7
Figure 9  Pakistan has signed several multilateral and bilateral trade agreements 7
Figure 10  The survey interviewed 1,152 Pakistani exporters and importers 8
Figure 11  Pakistani producers usually process their own exports 9
Figure 12  Most survey participants are small enterprises and based in Punjab and Sindh 10
Figure 13  The survey covered exporters from most sectors 10
Figure 14  Asia is the top market for most agriculture exporters and the EU for manufacture exporters 11
Figure 15  Pakistan has a low female employment rate and few women in key company positions 12
Figure 16  Fresh food exporters are most affected by non-tariff measures 14
Figure 17  Asia and Europe impose most of the challenging regulations 15
Figure 18  Exporters have the most trouble with conformity assessment and export-related measures 16
Figure 19  Export inspection is the leading domestic regulatory challenge for exporters 19
Figure 20  Procedures make compliance with regulations difficult for Pakistani exporters 22
Figure 21  Domestic procedures are the most troublesome 23
Figure 22  Traders view the business environment as not ideal, but improving 24
Figure 23  Conformity assessment is the biggest stumbling block for firms of all sizes 25
Figure 24  Firms face most difficulties exporting agricultural goods to the EU 26
Figure 25  Testing and certification requirements are tough for most produce exporters 28
Figure 26  Non-tariff measures hinder most live animal and meat exporters 30
Figure 27  Regulations and procedures hold back 55% of rice exporters 31
Figure 28  Domestic regulations are a big hurdle for manufacturing exporters of all sizes 33
Figure 29  Most difficult foreign regulations for manufacturing exporters originate in the EU 34
Figure 30  Domestic rules and procedures are the main problem for textile and garment exporters 37
Figure 31  Finance measures are the biggest challenge for Pakistani importers 39
Figure 32  Burdensome regulations affect more women-led exporters than men-led exporters 42
Figure 33  Most business associations are unhappy with progress on trade policy and agreements 48
Figure 34  Half of business associations are satisfied with improved customs procedures 52
Figure 35  Most business associations say availability of trade information has improved 61
**Acronyms**

Unless otherwise specified, all references to dollars ($) are to United States dollars, and all references to tons are to metric tons.

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANF</td>
<td>Anti-Narcotics Force</td>
</tr>
<tr>
<td>DPP</td>
<td>Department of Plant Protection</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>ISO</td>
<td>International Standards Organization</td>
</tr>
<tr>
<td>ITC</td>
<td>International Trade Centre</td>
</tr>
<tr>
<td>NTM</td>
<td>Non-tariff measure</td>
</tr>
<tr>
<td>PO</td>
<td>Procedural obstacle</td>
</tr>
<tr>
<td>PSQCA</td>
<td>Pakistan Standards and Quality Control Authority</td>
</tr>
<tr>
<td>SAARC</td>
<td>South Asian Association for Regional Cooperation</td>
</tr>
<tr>
<td>SBP</td>
<td>State Bank of Pakistan</td>
</tr>
<tr>
<td>SME</td>
<td>Small and medium-sized enterprise</td>
</tr>
<tr>
<td>SPS</td>
<td>Sanitary and phytosanitary</td>
</tr>
<tr>
<td>TBT</td>
<td>Technical barriers to trade</td>
</tr>
<tr>
<td>UNCTAD</td>
<td>United Nations Conference on Trade and Development</td>
</tr>
<tr>
<td>WeBOC</td>
<td>Web-based customs clearance system</td>
</tr>
<tr>
<td>WTO</td>
<td>World Trade Organization</td>
</tr>
</tbody>
</table>
Executive summary

One in two Pakistani exporters struggles with regulations

About half of the Pakistani exporters find it hard to comply with trade-related regulations or procedures in Pakistan and abroad. Governments impose measures such as testing, certification and licensing to regulate markets, protect their consumers and preserve their natural resources. Traders in developing and least developed countries, in particular, have the most difficulty dealing with these non-tariff measures (NTMs).

The NTM Business Survey in Pakistan finds that 49% of small enterprises and 57% of medium-sized firms have trouble with non-tariff measures, while 54% of large companies consider them to be burdensome. Almost half of the challenges these firms reported stem from Pakistani rules on matters such as export inspections, tax refunds and export certification.

These invisible barriers to trade affect exporters and importers differently, and their impact varies across sectors. Regulations and the procedures to comply with them are difficult for 51% of Pakistani exporters and 46% of importers. Most agricultural exporters (60%) – especially those dealing with fresh and processed foods – experience difficulties with these measures, as most countries have stringent regulations in place to protect human health and the environment. In comparison, 47% of the Pakistani companies that export manufactured goods face problems.

Conformity assessment is the top challenge

Technical measures are the main obstacle for exporters. Conformity assessment requirements such as testing and product certification are a bigger concern (41%) than rules related to quality standards, safety and production processes (4%).

In fact, Pakistani exporters say that high costs and administrative hurdles related to conformity assessment mean it is actually tougher to prove compliance with regulations than to comply. This mirrors survey results in other developing countries.

Issues such as the preshipment and border clearance procedures of partner countries, price-control measures and rules of origin are relatively minor compared to the difficulties associated with conformity assessment procedures, the survey finds.

Asian and European regulations are the most reported

Destination partners apply 55% of the measures that are troublesome for Pakistani exporters. Transit countries apply less than 1%.

Almost 43% of the difficulties involve regulations of Asian countries (excluding the South Asian Association for Regional Cooperation, or SAARC), and particularly Gulf Cooperation Council members. More than one-third (36%) of burdensome foreign regulations are European. Pakistani exporters say complying with European rules is difficult and the accompanying conformity assessment procedures are too strict. The neighbouring SAARC countries account for only 5% of the problems that Pakistani exporters experience with foreign regulations.

At the individual partner country level, the United Arab Emirates and the United Kingdom are responsible for the most reported regulations, each accounting for 8%. German measures account for 6%, while Oman and the United States account for 5% each.

Domestic regulations create obstacles

Pakistani regulations account for about 45% of the troublesome measures that exporters face. Most of these involve export inspections (31%), tax refunds (27%) and export certification (10%). Pakistani policies cause 55% of the problems reported by exporters of manufactured goods, and one-third of the difficulties that agriculture exporters experience. Large firms (52%) face more problems with domestic export regulations than small and medium-sized businesses (45%).
Women-led enterprises are more affected

Women-led companies report the same sorts of trade-related hurdles as men-led companies, but the impact on women-led companies is more severe. The survey also finds that, for various reasons, many women-led enterprises in Pakistan have failed to export successfully.

Procedures are a major hurdle

The survey identifies the measures that affect exporters as well as the reasons they are burdensome. Exporters often face difficulties with a regulation not only because it is too strict or complex, but also – and at times solely – because of the steps they must take to comply with that regulation.

Pakistani exporters say the regulations are overly strict or compliance is difficult in just 12% of the cases. In contrast, the procedures are the problem in 70% of the cases – and most of these occur in Pakistan itself. The remaining 18% are difficult due to both the regulation itself and related procedures.

More than two-thirds of these obstacles occur in Pakistan. The most important ones are slow processes on the necessary paperwork and high fees and charges to obtain required certification or testing. Informal payments and inadequate facilities for testing and certification in Pakistan were also frequently reported.

The way forward: Quality infrastructure and compliance

The survey results and report recommendations aim to help the Government and businesses understand the biggest problems facing Pakistani traders and tackle these issues. The survey identifies numerous challenges, especially regarding export-quality management and infrastructure in the country. These must be addressed to support private-sector development and to strengthen export competitiveness.

Improving quality infrastructure and enforcing quality compliance are key to export development. For instance, Pakistan should increase the capacity of local laboratories to carry out required testing and certification. Efforts need to be made to strengthen the capacity of small and medium-sized enterprises to comply with international market access requirements.

The absence of proper warehouse and cold storage facilities at major borders points is a serious problem that must be fixed. Trade procedures need to be streamlined and paperwork at government offices and customs offices should be automated to reduce the administrative burdens and costs shouldered by Pakistani exporters.

Exporters lack the resources and the skills to acquire and process trade-related information. Traders need a proper portal that can provide reliable export- and import-related information. This portal should store information about trade regulations and procedures, and provide facts about relevant agencies, port authorities and customs.

Finally, Pakistani trade regulations and processes must be streamlined to facilitate exports. A policy rethink is needed on advance payment restrictions on raw material imports and processes involving the duty drawback scheme. Export inspection processes at the customs also should be improved.

Survey sample is representative of Pakistani traders

The results presented in this report are based on a large-scale business survey (See Appendix I) carried out by the International Trade Centre in February–July 2019. The NTM Business Survey in Pakistan aims to provide a better understanding of the hurdles that hold back exporters and importers, and to identify potential bottlenecks related to trade procedures and cross-border operations. ITC interviewed 1,152 trading companies in Pakistan, targeting active exporters.

The recommendations made in the report are based on consultations with relevant stakeholders and are in line with ITC’s action plan aimed at supporting small businesses in developing countries affected by the COVID-19 crisis.
UNDERSTANDING NON-TARIFF MEASURES

What are non-tariff measures?

Non-tariff measures (NTMs) are ‘policy measures, other than customs tariffs, that can potentially have an economic effect on international trade in goods, changing quantities traded, or prices or both’. The concept of NTMs is neutral and does not imply a direction of impact.

Being ‘defined by what they are not’, these measures comprise many policies other than tariffs. They are complex legal texts specific to the product and the applying country. They are more difficult to quantify or compare than tariffs.

Classifying NTMs

NTMs may be applied for legitimate reasons, including the protection of human, animal and plant health. As such, this report does not make a judgement on intentions or the legitimacy of a measure.

By design, the survey only captures measures that cause difficulties for trading companies. NTMs analysed in this report refer to ‘burdensome NTMs’.

The diversity of non-tariff measures requires a classification system. ITC NTM surveys are based on the international classification developed by the Multi-Agency Support Team, incorporating minor adaptations to the ITC NTM survey approach.

Procedural obstacles and the business environment

Procedural obstacles refer to practical challenges directly related to the implementation of non-tariff measures. Examples include problems caused by the lack of adequate testing facilities to comply with technical measures or excessive paperwork in the administration of licences.

Inefficiencies in the trade-related business environment may have similar effects, but these are unrelated to specific NTMs. For example delays and costs due to poor infrastructure.

---

1 Multi-Agency Support Team (2009).

2 The term ‘non-tariff barrier’ implies a negative impact on trade. The Multi-Agency Support Team and the Group of Eminent Persons on Non-Tariff Barriers proposed that non-tariff trade barriers be a subset of NTMs with a ‘protectionist or discriminatory intent’.


4 For further details on the Multi-Agency Support Team NTM classification, see Appendix II.
A BUSINESS SURVEY ON NON-TARIFF MEASURES

A business perspective is imperative

As exporters and importers deal with NTMs and other challenges firsthand, a business perspective on these measures is indispensable. For governments, understanding the main concerns of companies about non-tariff measures, procedural obstacles and trade-related business environments can help define national strategies to overcome trade obstacles.

The International Trade Centre (ITC), in collaboration with the World Bank, carried out the NTM Business Survey in Pakistan in 2019. The survey seeks to provide a better understanding of the trade obstacles confronting Pakistani companies and to identify potential bottlenecks related to trade procedures and cross-border operations.

Information obtained from the survey will help both the private sector and the Government create an enabling environment for private sector development and improve the export competitiveness of Pakistan.

Methodology and survey implementation

ITC adapted the general methodology of the survey to meet the needs and requirements of Pakistan. ITC compiled a registry of more than 12,000 active exporters in the country to determine the population size and to contact the companies. A stratified random sampling method was used to calculate the sample size for each sector. This approach ensures that survey results are representative by sector.

Interviews with Pakistani enterprises were held in February–July 2019. Additional interviews were also conducted with representatives of various public agencies and business associations.

Stakeholder consultations

ITC has also engaged bilaterally with representatives of public sector agencies and business associations, as well as experts on Pakistani trade policy, custom procedures and quality infrastructure, to gain a comprehensive understanding NTM-related hurdles faced by exporters and importers in the country.

Furthermore, consultations were held with public and private sector representatives during the National Stakeholder Meeting on Non-Tariff Measures on 17 July 2019 in Islamabad. The meeting aimed to validate the results, stimulate a public and private sector dialogue, and develop proposals and policy options to address the problems identified in the survey.

Recommendations presented in this report have been drafted in consultation with relevant experts and stakeholders.

---

5 For details on the methodology, see Appendix I.
6 See agenda of the meeting in Appendix IV.
PAKISTAN’S ECONOMY: THE BIG PICTURE

Figure 1  Pakistan relies heavily on imports while its service sector continues to grow


Figure 2  EU is the biggest export market, textiles and cotton are the top exports

Pakistan: Invisible barriers to trade

Figure 3  China and EU provide most Pakistani imports

![Pie chart showing Pakistan's main import markets (2018)]


Figure 4  EU offers the most duty-free access for Pakistani products

<table>
<thead>
<tr>
<th>Pakistan’s major export markets (2018)</th>
<th>Diversification 95% trade in number of HS-2 digit HS-6 digit</th>
<th>Average MFN of traded tariff lines Simple Weighted</th>
<th>Preference margin Weighted</th>
<th>Duty-free imports</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Tariff lines (% of total)</td>
</tr>
<tr>
<td>Agricultural products</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>European Union</td>
<td>16 49</td>
<td>13.8% 10.4%</td>
<td>6.4%</td>
<td>62.8% 61.6%</td>
</tr>
<tr>
<td>Afghanistan</td>
<td>6 13</td>
<td>8.8% 6.8%</td>
<td>0.3%</td>
<td>0.0% 0.0%</td>
</tr>
<tr>
<td>United Arab Emirates</td>
<td>12 25</td>
<td>5.3% 0.6%</td>
<td>0.0%</td>
<td>33.7% 88.4%</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>13 42</td>
<td>8.2% 2.0%</td>
<td>0.0%</td>
<td>29.0% 70.6%</td>
</tr>
<tr>
<td>China</td>
<td>8 10</td>
<td>17.4% 43.8%</td>
<td>2.6%</td>
<td>26.5% 9.6%</td>
</tr>
<tr>
<td>Non-agricultural products</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>European Union</td>
<td>27 229</td>
<td>4.9% 9.9%</td>
<td>9.8%</td>
<td>99.3% 99.8%</td>
</tr>
<tr>
<td>United States</td>
<td>24 118</td>
<td>6.6% 9.4%</td>
<td>0.4%</td>
<td>48.1% 17.6%</td>
</tr>
<tr>
<td>China</td>
<td>19 60</td>
<td>10.5% 5.6%</td>
<td>2.8%</td>
<td>38.0% 38.0%</td>
</tr>
<tr>
<td>United Arab Emirates</td>
<td>46 283</td>
<td>4.7% 3.2%</td>
<td>0.0%</td>
<td>5.9% 37.0%</td>
</tr>
<tr>
<td>India</td>
<td>17 42</td>
<td>11.4% 6.4%</td>
<td>1.6%</td>
<td>1.0% 22.3%</td>
</tr>
</tbody>
</table>

Figure 5  Clothing products and rice have the greatest export potential

<table>
<thead>
<tr>
<th>Product</th>
<th>Export Potential in billions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apparel</td>
<td>$6.5</td>
</tr>
<tr>
<td>Textile fabrics</td>
<td>$4.6</td>
</tr>
<tr>
<td>Home textiles</td>
<td>$4.1</td>
</tr>
<tr>
<td>Rice</td>
<td>$2.4</td>
</tr>
<tr>
<td>Skins, leather and products thereof</td>
<td>$1.7</td>
</tr>
<tr>
<td>Fruits and vegetables</td>
<td>$1.6</td>
</tr>
<tr>
<td>Miscellaneous manufactured products</td>
<td>$0.7</td>
</tr>
<tr>
<td>Mineral products and electrical energy</td>
<td>$0.5</td>
</tr>
<tr>
<td>Fish and shellfish</td>
<td>$0.5</td>
</tr>
<tr>
<td>Sugar</td>
<td>$0.5</td>
</tr>
</tbody>
</table>

Top 10 products with most potential in billions

The Export Potential indicates a potential export value based on supply, demand and ease of trade considerations.

The Untapped Potential signals room for export growth if frictions, for example in the form of regulatory or procedural obstacles can be overcome.


Figure 6  United States, China and Germany are the most promising markets

<table>
<thead>
<tr>
<th>Country</th>
<th>Export Potential in billions</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>$3.8</td>
</tr>
<tr>
<td>China</td>
<td>$2.5</td>
</tr>
<tr>
<td>Germany</td>
<td>$1.9</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>$1.6</td>
</tr>
<tr>
<td>Afghanistan</td>
<td>$1.5</td>
</tr>
<tr>
<td>Spain</td>
<td>$1.1</td>
</tr>
<tr>
<td>France</td>
<td>$1.0</td>
</tr>
<tr>
<td>Netherlands</td>
<td>$0.9</td>
</tr>
<tr>
<td>Italy</td>
<td>$0.8</td>
</tr>
<tr>
<td>United Arab Emirates</td>
<td>$0.8</td>
</tr>
</tbody>
</table>

Top 10 markets where Pakistan has most export potential in billions

The Export Potential indicates a potential export value based on supply, demand and ease of trade considerations.

The Untapped Potential signals room for export growth if frictions, for example in the form of regulatory or procedural obstacles can be overcome.

Pakistan: Invisible barriers to trade

Figure 7 Exporters in Pakistan, by sector and region

Most exporters are from the clothing and miscellaneous manufacturing sector

Exporters are largely based in Punjab and Sindh

Note: The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

Source: Based on a registry of exporters compiled by ITC. Company information was sourced from Trade Development Authority of Pakistan, various business associations and chambers of commerce.
Figure 8  Pakistan and its Trade Facilitation Agreement commitments

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category A</td>
<td>Provisions that Pakistan has implemented when the agreement entered into force</td>
</tr>
<tr>
<td>26%</td>
<td></td>
</tr>
<tr>
<td>Category B</td>
<td>Provisions that Pakistan has committed to implement following a transitional period – latest by July 2023.</td>
</tr>
<tr>
<td>43%</td>
<td></td>
</tr>
<tr>
<td>Category C</td>
<td>Provisions that Pakistan has committed to implement following a transitional period – latest by July 2023 — and requiring technical assistance mainly in upgrading the ICT infrastructure and capacity building of its staff.</td>
</tr>
<tr>
<td>31%</td>
<td></td>
</tr>
</tbody>
</table>


Figure 9  Pakistan has signed several multilateral and bilateral trade agreements

<table>
<thead>
<tr>
<th>Bilateral free trade agreements</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
</tr>
<tr>
<td>Malaysia</td>
</tr>
<tr>
<td>Sri Lanka</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bilateral partial trade agreements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indonesia</td>
</tr>
<tr>
<td>Iran</td>
</tr>
<tr>
<td>Mauritius</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ongoing bilateral trade agreement negotiations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afghanistan</td>
</tr>
<tr>
<td>Bosnia and Herzegovina</td>
</tr>
<tr>
<td>Egypt</td>
</tr>
<tr>
<td>Laos</td>
</tr>
<tr>
<td>Mexico</td>
</tr>
<tr>
<td>Republic of Korea</td>
</tr>
<tr>
<td>Singapore</td>
</tr>
<tr>
<td>Serbia</td>
</tr>
<tr>
<td>Thailand</td>
</tr>
<tr>
<td>Turkey</td>
</tr>
<tr>
<td>Yemen</td>
</tr>
</tbody>
</table>


Note: To the best of ITC’s knowledge, this figure reflects the situation as of September 2019. The number and list of products for which preferences are granted varies from country/territory to country/territory. Only agreements with reciprocal preferences are shown. Pakistan may be granted preferential tariffs resulting from trade regimes such as the Generalized System of Preferences, i.e. from countries providing non-reciprocal preferential tariffs to developing and least developed countries.

The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.
CHAPTER 1  PROFILES OF SURVEYED COMPANIES

Focus on exporters

ITC interviewed companies in Pakistan in a two-stage process:

**Telephone Interviews**

The first step involves short telephone interviews designed to confirm the main sector of activity, direction of trade and whether the company has experienced difficulties with non-tariff measures.

Companies interviewed in the phone screening phase are selected based on stratified random sampling. A total of 1,152 firms were interviewed in this phase.

**Face-to-face interviews**

Companies facing obstacles due to non-tariff measures are invited to participate in detailed face-to-face interviews. During these interviews, they are asked for details about of the types and causes of the regulatory NTM-related problems they face.

A total of 301 companies affected by measures that they considered burdensome participated in these interviews (Figure 10).

**Figure 10**  The survey interviewed 1,152 Pakistani exporters and importers

<table>
<thead>
<tr>
<th>Types of companies interviewed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 1: Telephone interviews</td>
</tr>
<tr>
<td>Exporters</td>
</tr>
<tr>
<td>Both exporters and importers</td>
</tr>
<tr>
<td>Importers</td>
</tr>
<tr>
<td>Stage 2: Face-to-face interviews</td>
</tr>
<tr>
<td>Exporters</td>
</tr>
<tr>
<td>Both exporters and importers</td>
</tr>
<tr>
<td>Importers</td>
</tr>
</tbody>
</table>

**Source:** ITC NTM Business Survey in Pakistan, 2019.
The NTM Business Survey sought to uncover export bottlenecks, and its results are representative of the export sector. However, as many exporters rely on imports of intermediate inputs, companies were also asked about their importing activities and difficulties, if any. Only a small percentage of randomly selected companies were exclusively importers.

ITC interviewed 1,152 trading enterprises in Pakistan, of which 66% were exporters, almost 13% were importers and 21% were involved in both exporting and importing (Figure 10).

**Pakistani exporters tend to be producers**

Most of the surveyed companies identify themselves as producers (78%); they either manufacture the goods they export or at least contribute some value addition (Figure 11). Some 22% of the exporters are traders, sourcing goods from other Pakistani producers and exporting them to foreign buyers without any value addition.

**Exporters handle their own export processes**

More than three-quarters of Pakistani enterprises can manage the export process without the support of a specialized forwarding company. However, 11% rely on specialized forwarding companies and 5% entrust exporting activities to their partners abroad (Figure 11).

**Most exporters are small or medium-sized firms**

Most survey respondents were small enterprises (61%), followed by medium-sized firms (19%) and large companies (9%) (Figure 12). The classification of companies according to size is based only on the number of employees. Companies with 50 or fewer employees are classified as small, those with 51–250 employees are classified as medium-sized, and businesses with more than 250 employees are classified as large.

**Survey covers companies located across Pakistan**

The NTM Business Survey has wide geographic coverage, including more than 20 cities or towns and the surrounding region. Most of the surveyed companies are based in Lahore and the surrounding area in Punjab province (Figure 12).

---

7 In 2016, the State Bank of Pakistan decided to redefine the size of small and medium-sized enterprises. For small companies, the upper limit of employees increased from 20 to 50 employees. A medium-sized enterprise is a business entity with 51–250 employees in the manufacturing and service sectors.
Pakistan: Invisible barriers to trade

The survey covers companies located in the following cities: Bahawalpur, Faisalabad, Jhang, Gujrat, Gujranwala, Lahore, Multan, Rawalpindi, Sahiwal, Sargodha, Sheikhpura, Sialkot (Punjab province); Karachi, Khairpur and Sukkur (Sindh province); Lasbela and Quetta (Baluchistan province); Peshawar (Khyber Pakhtunkhwa) and Islamabad.

Figure 12  Most survey participants are small enterprises and based in Punjab and Sindh

Survey includes exporters in most sectors

Well over two-thirds of the surveyed enterprises export manufactured goods. The largest groups export clothing (19%), yarn, fabrics and textiles (14%), leather and leather products (8%), chemicals (5%), and miscellaneous and other manufacturing products (9%).

Figure 13  The survey covered exporters from most sectors

About a third of the surveyed exporters (31%) operate in the agricultural sector (Figure 13). These include exporters of fresh food and raw agro-based products (21%), such as fresh vegetables and fruits, nuts, honey, dairy and meat, as well as exporters of processed food and agro-based products (10%).

---

8 ITC categorizes the surveyed companies in two broad sectors (agriculture and manufacturing) and a further 13 subsectors – based on the main export of each company.
Asia and Europe are the main markets for most exporters

The key markets for Pakistani agricultural and manufacturing exports differ significantly. Asia (excluding the SAARC region) is the main destination market for 51% of agricultural exporters, followed by the SAARC region (22%) and Europe (19%) (Figure 14). On the other hand, Europe is the main market for 44% of surveyed manufactured goods exporters, followed by Asia (24%) and SAARC (13%).

Figure 14  Asia is the top market for most agriculture exporters and the EU for manufacture exporters


During the initial telephone interviews, companies are asked to identify their main export market (region) based on the value of their sales. In the subsequent face-to-face interviews (where companies report difficulties with non-tariff measures), firms are asked to identify the destination markets (country level) for each of their export products (at HS-6 digit level). In addition, they are asked if they have faced any regulatory or procedural obstacles to trade when exporting each of their goods to their corresponding market(s).
Female employment in Pakistani companies is low

On average, 4% of the workers employed by the surveyed companies are women (Figure 15). More than half (60%) of the companies have no female workers, while 80% had less than 10% female employees. Less than 1% of the companies employed more women than men.

There are some variations across companies of different sizes. Medium-sized and large firms tend to employ a larger proportion of women, 8% and 13% respectively, compared with small enterprises (2%).

Men owned or managed 86% of the surveyed companies; only 9% were headed by women. These firms are managed by a woman (4%), owned by a woman (4%) or both (less than 1%).

Figure 15  Pakistan has a low female employment rate and few women in key company positions

CHAPTER 2 THE COMPANY PERSPECTIVE

Common challenges

Non-tariff measures affect most exporters

More than half of the surveyed companies said they had faced restrictive regulations or related obstacles to trade in Pakistan or abroad when exporting. These difficulties related to their current experiences or experiences in the past year.

Companies may find compliance with any given non-tariff measure difficult for various reasons. The conditions of a regulation may be overly complex or trade-restrictive – for instance, businesses may be unable to export due to export prohibitions or because they are unable to meet high-quality requirements.

Furthermore, exporters may struggle with a particular regulation because of the related procedural obstacles. These obstacles can arise in Pakistan, in transit countries or in destination countries, irrespective of which country applies the measure. NTMs are official regulations applied by the authorities in the exporting or importing country, while procedural obstacles are problems that firms face due to the way the regulations are implemented.

Non-tariff measures also affect importers

These regulations affect importers and exporters differently, and their impact varies across different sectors in Pakistan. The share of affected companies is higher among exporters than importers, for example. About 46% of importers have experienced regulatory or procedural obstacles (Table 1). Most of these companies import goods for further processing rather than direct sales.
Table 1 Non-tariff measures affect Pakistani exports and imports

<table>
<thead>
<tr>
<th>Company type</th>
<th>Sector</th>
<th>Pakistan’s export or import value in 2018 ($ '000)</th>
<th>Sector’s share in total exports or imports</th>
<th>Number of surveyed companies</th>
<th>Share of companies facing difficulties with NTMs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exporters</td>
<td>Agri-food</td>
<td>5,045,064</td>
<td>22%</td>
<td>315</td>
<td>60%</td>
</tr>
<tr>
<td></td>
<td>Manufacturing</td>
<td>17,701,113</td>
<td>78%</td>
<td>694</td>
<td>47%</td>
</tr>
<tr>
<td></td>
<td><strong>Subtotal</strong></td>
<td><strong>22,746,177</strong></td>
<td><strong>100%</strong></td>
<td><strong>1,009</strong></td>
<td><strong>51%</strong></td>
</tr>
<tr>
<td>Importers</td>
<td>Agri-food</td>
<td>7,515,607</td>
<td>18%</td>
<td>42</td>
<td>45%</td>
</tr>
<tr>
<td></td>
<td>Manufacturing</td>
<td>33,305,021</td>
<td>82%</td>
<td>345</td>
<td>46%</td>
</tr>
<tr>
<td></td>
<td><strong>Subtotal</strong></td>
<td><strong>40,820,628</strong></td>
<td><strong>100%</strong></td>
<td><strong>387</strong></td>
<td><strong>46%</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>1,152</strong></td>
<td><strong>50%</strong></td>
</tr>
</tbody>
</table>

Note: 1/ A total of 244 surveyed firms were involved in both exporting and importing. These companies were interviewed separately about each activity and are included separately in the count for exporters and importers. The total of exporting and importing companies (1,152) represents the number of individual companies interviewed rather than the sum of the subtotals in the table (1,396).


Companies in the agriculture sector are more affected

While onerous regulations and procedures cause problems for 47% of exporters in the manufacturing sector, the rate exceeds 60% among agricultural exporters. Those that export fresh and processed food are particularly affected. In general, these products are highly regulated to protect human health and the environment.

Figure 16 Fresh food exporters are most affected by non-tariff measures

Share of exporters affected by non-tariff measures across different sectors

- Fresh food and raw agro-based products: 63%
- Processed food and agro-based products: 52%
- Textile products: 51%
- Clothing: 50%
- Leather goods: 44%


Roughly 63% of fresh food exporters and 52% of processed food exporters said they faced burdensome regulations (Figure 16). Sanitary and phytosanitary (SPS) measures and related certification or control procedures especially affect agri-food products, which tend to be highly perishable and fragile. Most countries are very vigilant about consumer safety and strongly emphasize food controls.

In the manufacturing sector, burdensome measures affect 51% of textile exporters, 50% of clothing exporters and 44% of leather product exporters.

Companies of all sizes are affected

Half of small firms, 57% of medium-sized enterprises and 54% of large companies reported difficulties with regulations. For a small firm, the burden of tackling a non-tariff measure or procedural obstacle in one or more of its few markets can be huge. In contrast, a more diversified, large company can compensate for difficulties in some markets by doing more business in others. Smaller companies also struggle more than larger enterprises to bear the costs of complying with regulations.
Both foreign and local regulations are burdensome

More than half (55%) of the challenging measures reported by exporters are regulations of partner (importing) countries. The rest are Pakistani regulations pertaining to exports. Less than 1% of the reported hurdles are transit country regulations.

NTM survey results in Pakistan differ substantially from those of other countries that ITC surveyed in the Asian region. In Pakistan, almost half of the reported non-tariff barriers stem from domestic regulations. In other Asian countries, only 20% of the troublesome NTMs are related to domestic regulations.¹⁰

Asian and European countries account for most onerous NTMs

Countries in Asia and Europe impose most of the foreign regulations that Pakistani traders perceive as difficult. Asian countries (excluding the SAARC region) are responsible for 43% of the foreign measures reported by survey respondents. Most of these originate in the United Arab Emirates (8%), Saudi Arabia (6%) and Oman (5%) (Figure 17).

European countries account for 36% of burdensome foreign regulations. Most of these come from the United Kingdom (8%), Germany (6%), Italy (4%) and the Russian Federation (4%). Exporters from developing countries struggle to comply with European Union (EU) regulations – particularly SPS and quality requirements – and consider the accompanying conformity assessment procedures to be overly strict.

Countries in the neighbouring SAARC region and the United States each account for 5% of the reported difficulties with foreign regulations.

Figure 17  Asia and Europe impose most of the challenging regulations


Technical regulations hinder Pakistani firms in all sectors

Technical regulations, which include technical requirements and related conformity assessment measures, account for the largest share (45%) of the measures that hinder Pakistani exporters.

These regulations are the top concern in both the agricultural and the manufacturing sectors. Difficult conformity assessment requirements such as testing and product certification (41%) trouble Pakistani exporters more than technical requirements (4%).

In fact, exporters find it harder to prove compliance with the regulations than to comply with them, usually due to high costs and administrative hurdles related to the conformity assessment.

Difficulties with conformity assessment are more pronounced among agricultural exporters (59%) than exporters of manufactured products (27%).

Figure 18 Exporters have the most trouble with conformity assessment and export-related measures

Pakistani exporters also find it hard to comply with other regulations, such as preshipment inspection and entry formalities as well as finance and price-control measures. Preshipment inspections and border clearance present more of a hindrance to the manufacturing sector (6%) than to the agriculture sector (1%).

Problems with rules of origin or obtaining a certificate of origin are minimal (1%), and are mainly reported by exporters of manufactured goods. The main concern of Pakistani exporters vis-à-vis rules of origin and the related certificate is the lack of adequate information.

Proving compliance with technical requirements is hard

Conformity assessment requirements make up 41% of reported NTM cases, which include difficulties with product certification and testing obligations. Factors such as limited infrastructure and lack of well-trained staff have contributed to compliance problems in Pakistan.

Most of these requirements, which aim to ensure quality or safety, are imposed by European countries (33%), followed by Saudi Arabia (7%) and Oman (6%).

More than half of the burdensome technical regulations reported in the survey pertain to quality and safety certificates for fresh fruits and vegetables. Pakistani exporters also find it difficult to obtain certifications such as AZO-free dyes (carpets) and OEKO-TEX, SA8000 and BSCI (textiles and garments).

Concerns about conformity assessment include the inability of Pakistani laboratories to do the necessary testing and issue the required certificates, and the fact that certificates issued by Pakistani public institutions are not recognized internationally. As a result, many exporters use laboratories in other countries, leading to longer processing times and higher costs.

Pakistani laboratories provide testing services on few products with limited parameters because of weak infrastructure and insufficient capacity.  

Moreover, strict traceability requirements mean meat exporters are unable to access the EU and the US markets. European countries and the United States require the disclosure of information on all stages of production, which may include locations and the processing methods and/or equipment and materials used.

Exporters see certification as a cost, not an investment

Companies tend to consider quality certification, inspections and testing as a cost, rather than an investment for their products to compete internationally.

A lack of awareness about the benefits and necessity of such conformity assessment is one reason for such sentiments. This could be addressed through trainings and seminars to build the capacity of the private sector.

What are conformity assessment requirements?

The World Trade Organization Agreement on Technical Barriers to Trade defines conformity assessment as ‘any procedure used, directly and indirectly, to determine that relevant requirements in technical regulations or standards are fulfilled’. These requirements include procedures for sampling, testing and inspection; evaluation, verification and assurance of conformity; and registration, accreditation and approvals (ITC, 2005).

Exporters must present a certificate of conformity of their goods, a mark on the product label or both. National standards bodies, trade and industry associations, or third-party certification bodies usually issue the certifications. Though the importing country requires the certification, it may be issued either in the exporting or the importing country.

In the context of the NTM survey, the term ‘conformity assessment’ is also used for procedures to prove compliance with SPS measures.
Pakistan: Invisible barriers to trade

Another reason exporters are reluctant to become certified is the additional efforts and costs involved. The limited number of conformity assessment laboratories in Pakistan means the costs and time involved in sending samples for testing are a hindrance to some companies. A few labs do offer collection and return services, but these come with a premium attached.

Certification from an accredited laboratory is essential

In an effort to minimize costs, some exporters have relied on companies that deliver subpar services or are not accredited. It is vital for firms to be aware of the quality of service that is offered. Many private labs in Pakistan are incapable of delivering proper quality control and testing, but they offer low-cost certification. On multiple occasions, exporters have obtained quality and safety certification for their products from laboratories at a relatively low cost, but these labs were neither registered nor accredited. As a result, customs rejected the consignments for failing quality-control tests.

The Pakistan National Accreditation Council accredits labs and certification bodies in Pakistan. Exporters must be diligent and verify that the certifying body from which they receive a certificate is accredited.

Several internationally recognized laboratories providing good-quality services also operate in Pakistan. Although they charge more than other private and public labs (because of their investments in infrastructure and training for their personnel), their certifications are recognized and accepted globally.

Information on export-quality management is inadequate

Some of the difficulties that exporters experience with conformity assessment are due to the lack of reliable information about the requirements and procedures. There are two national enquiry points in Pakistan – one each for issues related to technical barriers to trade (TBT) and SPS.

The Ministry of Commerce has designated the Pakistan Standards and Quality Control Authority (PSQCA) as the TBT enquiry point. It provides information on the regulations of other countries, assists exporters, and provides information about accredited labs and certification bodies, and government-registered inspection agencies.

However, there is no easily accessible and updated information portal for all relevant information that an exporter would need. The website of the Small and Medium Enterprises Development Authority (SMEDA) does mention a procedure, but it is obsolete. Most websites for government departments are also outdated. No information is available on what tests should be taken, what laboratories or certification authorities exist, or the procedures or fees associated with these requirements.

Technical requirements are demanding

The main concern of exporters (17%) about technical requirements is the obligation to heat products below or above certain temperatures for a certain period of time to kill target pests either before or upon arrival at the destination country. Most problems with this measure involve EU (71%) and Canadian (29%) requirements. The strict rules applied by destination markets create major barriers for Pakistani exports.

Other technical requirements that hold back Pakistani exporters involve the restricted or prohibited use of certain substances (15%), production processes (15%) and product quality or performance (12%).

Insufficient fumigation and irradiation facilities in Pakistan also hinder exporters, particularly those that ship foods such as fruit and vegetables. Fumigation is a process of exposing insects, fungal spores or other organisms to lethal chemical fumes. Irradiation is a requirement to kill or weaken microorganisms, bacteria, viruses or insects that might be present in food and feed products by using irradiated energy (ionizing radiation).

What are technical requirements?

Technical requirements are product-specific properties that define the characteristics and technical specifications of a product or the production process and post-production treatment. They are legally binding and set by the destination or origin country. Technical requirements include mandatory administrative provisions.

Many of these measures protect consumers – for example, from health or safety risks – as well as plants, animals, the environment or the national security of a country. Technical requirements include sanitary and phytosanitary measures designed to safeguard human, animal and plant life and health from pests and diseases.
Difficulties with rules of origin and preshipment inspection

Pakistani exporters experience few difficulties related to rules of origin or the process of obtaining certificates of origin. These issues account for only 2% of the NTM cases reported by exporters of manufactured goods and less than 1% of the cases reported by exporters of agricultural products.

Various chambers of commerce around the country issue certificates of origin. To obtain the certificates, exporters must be a member of the chamber and submit documents including shipment details. The chamber usually does not cross-check the documents or the products before issuing certificates.

Manufacturing sector exporters struggle more with preshipment inspection and border clearance procedures (6%) than exporters of agricultural products (1%). The preshipment-related challenges are attributed to slow processing and the arbitrary behaviour of customs officials in destination countries.

Firms stumble over domestic regulations

Roughly, 45% of the difficulties that Pakistani exporters face are related to domestic regulations. Among these ‘export-related measures’, the most frequently mentioned are export inspection (31%), tax refunds related to exports (27%) and export certification (10%).

The manufacturing sector in particular associate many of its difficulties on Pakistani regulations (55%). This compares with 33% in the agriculture sector. Similarly, large firms face more challenges with domestic regulations (52%) than small and medium-sized exporters (45%).

Similar to the measures applied by destination markets, compliance with Pakistani regulations is deemed burdensome mainly because of the associated procedures.

Figure 19 Export inspection is the leading domestic regulatory challenge for exporters

Export inspections have caused delays and damage

Exporters consider Pakistani inspection requirements and customs clearance to be burdensome. The most common problems during export are the arbitrary behaviour of customs officers, reckless handling of goods and unnecessary delays during inspection, demands for informal payments and the need to submit a large number of different documents.

The biggest problem with export inspections is the long waiting time, according to exporters (in 33% of the cases). Exporters face a one-week delay on average if their goods are inspected, though delays of several weeks have also been reported. As a result, some exporters missed their booked cargo vessels and had to make alternative arrangements for shipments.

Furthermore, demurrage and additional expenses due to delays are costly for exporters. In about 30% the cases, exporters said the export inspection process is burdensome because of the high costs they incur.

A lack of scanners and proper facilities such as cold storage, as well as too few workers at various public agencies, also make inspection procedures difficult for exporters.

Exporters also frequently report damages to their products or its packaging that occur during export inspection. Exporters often only discover the damage when their goods reach buyers. While exporters understand that some packages have to be opened during inspections, they are unhappy that the products are not properly repacked. Exporters say they should be allowed to make sure their goods are repacked properly before being shipped to buyers.

The Pakistani Anti-Narcotics Force (ANF) inspects goods to combat money laundering and drug trade. About 2% of all shipments are checked, according to ANF. The authorities plan to install large scanners to avoid the problems that occur during manual inspection.

Finance restrictions create obstacles

Payment constraints imposed by the State Bank of Pakistan (SBP) hamper many companies. For instance, a ban on advance payments impairs Pakistani exporters using imported raw materials in their production (see section on Importers’ difficulties for details about payment restrictions).

Companies also say Pakistani banks are inefficient. It is difficult to track payments from abroad, and after a bank receives the money, there is a long process to release the payment. Moreover, exporters consider the regulations of Pakistani banks to be burdensome. To release a payment, an exporter must provide many documents to its bank, including all relevant details of the transaction.

Waiting times for tax rebates are long

The duty drawback scheme has been applied to various commodities in Pakistan since the 1960s. More recently, the Government began offering incentives to stimulate exports of textiles and other manufactured goods. Other financial incentives aim to boost exports of processed agricultural products.

The current duty drawback schemes are under:

- Notification No 1(42-B)TID/18-TR II Duty drawback Order 2018-21 for garments, home textiles and processed fabrics.

However, exporters find the duty drawback process to be redundant, complicated and time-consuming. The most commonly reported issue is the slow rebate process. Many refunds have been held up for years, which has affected the liquidity of Pakistani companies.

The procedure to file claims is complicated and much of the information that is demanded is unavailable when the claim is filed. In addition, many public agencies, such as the Ministry of Commerce and the Federal

---

Bureau of Revenue, are involved in the process. This makes it difficult to follow up and get updates about the status of refunds. Exporters said the tax rebate system should be more transparent.

Trade associations have no role in the current schemes, resulting in additional hurdles for claimant. Previously, associations were responsible for verifying claims before they were submitted to SBP. Now, all claims go to SBP through local banks, which are not capable of validating the documents before they are forwarded. This has caused delays in processing, and claims are sometimes rejected.

In addition, budgetary constraints in Pakistan have hindered payments to traders under the duty drawbacks schemes.

**Pakistan has several export prohibitions and price-control measures**

Pakistan allows exports of all items except those mentioned in Schedules I-IV of the Export Policy Order.\(^{15}\) To ensure enough domestic supply, many food products (such as white sugar, chickpeas, green beans and lentils) cannot be exported at any given time.

Additionally, kinnows and mangoes are subject to seasonal bans. Kinnows cannot be exported before 1 December and mango exports are only allowed after 20 May. Furthermore, mangoes can only be shipped to European countries, Canada, Iran, China, Kuwait and Bahrain by air and in standardized packaging.

Rice exports must meet quality conditions set by the Trade Development Authority of Pakistan. However, exporters say these conditions are not transparent. Additionally, exports can be prohibited without prior notice or a reason for the ban.

Pakistan forbids all exports to Israel and restricts exports of certain products to other countries. For instance, under the Afghanistan–Pakistan Transit Trade Agreement, vegetable ghee, cooking oil, cigarettes, dyes and cotton yarn cannot be shipped to Afghanistan. Onion exports to India are only allowed through the Wagah border.

Furthermore, more than 20 items are subject to a minimum export price in US dollars. This mainly covers surgical instruments such as tooth extraction forceps and several types of scissors. Exporters complain that these price-control measures disadvantage their goods vis-à-vis those of foreign competitors.

**National Logistics Cell is a dominant player in Pakistan’s freight transportation**

Road transport is crucial in Pakistan, accounting for 94% of freight traffic.\(^ {16}\) However, some companies say the National Logistics Cell (NLC) does not provide enough trucks and containers. Exporters report long delays to transport their goods, which damages their business. To avoid long waiting times, many companies use trucks provided by the private sector.

The Pakistani trucking industry is deregulated and there are no official restrictions on the use of private sector trucks.\(^ {17}\) In practice, however, NLC benefits from favourable market conditions. NLC operates dry ports and border terminals across Pakistan and is also responsible for collecting tolls on major highways.\(^ {18}\) Furthermore, for goods transit under the Afghan Transit Treaty, the Pakistan Government has chosen NLC as the sole Pakistani trucking company to handle transport domestically.\(^ {19}\)


\(^{17}\) See [http://www.engineeringpakistan.com/EngPak1/trucking/EXECUTIVE%20SUMMARY.pdf](http://www.engineeringpakistan.com/EngPak1/trucking/EXECUTIVE%20SUMMARY.pdf)


\(^{19}\) ITC (2015). Road freight transport sector and emerging competitive dynamics.
Procedures cause serious problems

Regulations that are overly strict or demanding cause 12% of the problems that exporters face. By contrast, 70% of NTMs are onerous only because of the related procedures. Both regulatory and procedural obstacles account for the remaining 18% of the difficulties that exporters experience (Figure 20). These POs occur both at home and in destination countries.

Slow procedures are the top impediment for exporters (Figure 21). Delays account for 30% of the reported POs, while 28% are caused by high fees and charges to obtain the required certification or testing.

Most difficulties related to high fees and charges occur abroad. This is due largely to the lack of appropriate facilities for testing and certification in Pakistan. Exporters must send their goods to other countries for testing, and they pay high fees for these services.

The third biggest PO is informal payments to get paperwork issued, clear shipments or expedite the process (11%).

More than 90% of informal payments involve Pakistani agencies, with the rest demanded by customs officials in destination markets or transit countries, notably Afghanistan and India. Exporters also reported conformity assessment obstacles caused by inadequate facilities in Pakistan. Domestic facilities lack international accreditation, which means partner countries often reject certification by these agencies.

Figure 20 Procedures make compliance with regulations difficult for Pakistani exporters

Pakistan: Invisibles barriers to trade

Figure 21  Domestic procedures are the most troublesome


Business environment in Pakistan is challenging, but improving

Surveyed companies identified challenges in the domestic trade-related business environment. Inefficiencies in the business environment are generic problems unrelated to specific regulations, but they affect the ability of enterprises to export or import.

Firms were asked to identify factors that made it difficult for them to conduct business and how these conditions had changed in the last five years.

The main concern about the business environment is time delays, identified by 86% of surveyed companies (Figure 22). Corruption and arbitrary behaviour (84%) and limited or costly airline transportation (81%) are their second- and third-biggest criticisms of the trade-related business environment.

Most firms also consider the clearance mechanism in Pakistan to be complicated. The majority of respondents believe that problems with limited or extremely expensive airline transportation and the lack of inputs for production have become worse in the past five years.

Nevertheless, the survey also reveals some encouraging results. For instance, 83% of the enterprises reported that computerized procedures had become better and 74% noted improvements in other technological constraints (Figure 22). More than two-thirds (69%) of interviewed companies agreed that electricity supply had been upgraded over the past five years.
Figure 22  Traders view the business environment as not ideal, but improving

Share of companies whose business is negatively affected by the current business environment

<table>
<thead>
<tr>
<th>Issue</th>
<th>Share of companies negatively affected (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of electronic or computerized procedures</td>
<td>67%</td>
</tr>
<tr>
<td>Technological constraints</td>
<td>71%</td>
</tr>
<tr>
<td>Problems with electricity supply</td>
<td>77%</td>
</tr>
<tr>
<td>Low security level for persons and goods</td>
<td>68%</td>
</tr>
<tr>
<td>Limited transportation system</td>
<td>81%</td>
</tr>
<tr>
<td>Complex clearance mechanism</td>
<td>78%</td>
</tr>
<tr>
<td>Lack of accredited testing laboratories</td>
<td>71%</td>
</tr>
<tr>
<td>Limited or lack of access to trade finance services</td>
<td>66%</td>
</tr>
<tr>
<td>Lack of human resources in agencies or organizations involved</td>
<td>81%</td>
</tr>
<tr>
<td>Road blocks and checkpoints</td>
<td>73%</td>
</tr>
<tr>
<td>Lack of storage facilities, including cooling</td>
<td>55%</td>
</tr>
<tr>
<td>Lack of access to information, no enquiry point</td>
<td>77%</td>
</tr>
<tr>
<td>Inconsistent or arbitrary behavior of officials</td>
<td>79%</td>
</tr>
<tr>
<td>Time delays</td>
<td>86%</td>
</tr>
<tr>
<td>Need to hire a local customs agent to get shipment unblocked</td>
<td>75%</td>
</tr>
<tr>
<td>Corruption</td>
<td>84%</td>
</tr>
<tr>
<td>Lack of access to inputs for production</td>
<td>78%</td>
</tr>
<tr>
<td>Lack of accessible business oriented legal support</td>
<td>73%</td>
</tr>
<tr>
<td>Ineffective legal enforcement</td>
<td>65%</td>
</tr>
<tr>
<td>Limited or extremely expensive airline transportation</td>
<td>81%</td>
</tr>
</tbody>
</table>

Agricultural export challenges

The agricultural sector employs 42% of the working population of Pakistan and contributes 23% to gross domestic product.\textsuperscript{20} Pakistani agri-food exports were valued at $5 billion in 2018.\textsuperscript{21} The biggest markets for these exports were Afghanistan (17%), the United Arab Emirates (8%), China (6%) and Indonesia (5%). Cereals (46%), sugar and sugar confectionery (10%), fish (9%) and fruit and nuts (8%) are the main exports.

Most agri-food exporters face hurdles

ITC interviewed 315 exporters of agricultural products, most of which were small or medium-sized businesses. The agriculture sector comprises two subsectors: raw agri-food products and processed food products. Trade obstacles affect more than half of the companies that export both fresh food and raw agro-based products (63%) and processed food (52%).

SMEs and large companies in Pakistan face similar problems (Figure 23). More than half of the reported cases involved conformity assessment. Exporters of fruits, vegetables, meat and rice reported the most difficulties with technical measures. Pakistani exporters are worried about their ability to prove compliance with EU technical requirements on agricultural products.

The most frequently reported conformity assessment problems are testing and product certification requirements. Many of these measures are deemed burdensome due to associated procedures, including the absence of appropriate laboratories, time delays, a lack of international recognition and high fees and charges.

Figure 23 Conformity assessment is the biggest stumbling block for firms of all sizes

Types of measures affecting agricultural exporters, by firm size


\textsuperscript{20} World Development Indicators, World Bank (2019).
\textsuperscript{21} ITC Trade Map (2019).
Small and medium-sized firms tend to struggle more with technical requirements than larger companies. Large enterprises report more problems with regulations related to charges, taxes and price controls than SMEs. Measures that Pakistan applies on exports account for roughly one-third of total cases, mostly involving inspections and export tax refunds.

*European markets pose the most problems*

EU countries – particularly the United Kingdom and Germany – impose the most regulations on Pakistani agricultural goods, according to exporters. Although the EU imports just 9% of Pakistan’s agricultural exports, it is responsible for 21% of all measures that were reported. The majority of these pertain to strict rules on food safety and related conformity assessments.

Similarly, the share of regulations originating in the United Arab Emirates and Saudi Arabia is higher than the share of Pakistani exports to these countries. For instance, 8% of the exports are destined for the United Arab Emirates, which accounts for 12% of the measures that are deemed burdensome (Figure 24).

In contrast, SAARC countries apply just 5% of the burdensome regulations, though these markets buy around 24% of Pakistani agricultural exports. Likewise, China accounts for 6% of these exports, but applies just 3% of the onerous measures.

**Figure 24** Firms face most difficulties exporting agricultural goods to the EU

<table>
<thead>
<tr>
<th>Country</th>
<th>Share of burdensome NTMs originating from the destination market</th>
<th>Share of Pakistan’s agriculture exports to that region</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU 28</td>
<td>21%</td>
<td>9%</td>
</tr>
<tr>
<td>United Arab Emirates</td>
<td>12%</td>
<td>8%</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>10%</td>
<td>4%</td>
</tr>
<tr>
<td>SAARC</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>China</td>
<td>3%</td>
<td>6%</td>
</tr>
<tr>
<td>Indonesia</td>
<td>7%</td>
<td>5%</td>
</tr>
</tbody>
</table>

*Sources:* ITC NTM Survey in the Pakistan, 2019; and ITC Trade Map, 2018.
Table 2  Agricultural exports – non-tariff measures and why they are burdensome

<table>
<thead>
<tr>
<th>NTM type</th>
<th>Number of cases reported for each measure type and the reason it is burdensome</th>
<th>POs making the measure difficult and where they occur</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Measures are too strict or difficult Due to procedural obstacles Both NTMs and POs are difficult</td>
<td>Type of procedural obstacles faced (POs)</td>
</tr>
<tr>
<td></td>
<td>POs making the measure difficult and where they occur</td>
<td>Pakistan</td>
</tr>
<tr>
<td>Technical requirements</td>
<td>7 10</td>
<td>Limited or inappropriate facilities 7 7</td>
</tr>
<tr>
<td></td>
<td>High fees and charges 4 1 5</td>
<td>High fees and charges 103 6 109</td>
</tr>
<tr>
<td></td>
<td>Delay related to reported regulation 3 3</td>
<td>Delay related to reported regulation 70 10 80</td>
</tr>
<tr>
<td></td>
<td>Informal payments 1 1</td>
<td>Informal payments 77 6 83</td>
</tr>
<tr>
<td>Conformity assessment</td>
<td>2 244 36</td>
<td>Limited or inappropriate facilities 79 2 81</td>
</tr>
<tr>
<td></td>
<td>High fees and charges 103 6 109</td>
<td>High fees and charges 3 3</td>
</tr>
<tr>
<td></td>
<td>Informal payments 77 6 83</td>
<td>Informal payments 1 1</td>
</tr>
<tr>
<td></td>
<td>Limited or inappropriate facilities 79 2 81</td>
<td>Limited or inappropriate facilities 70 10 80</td>
</tr>
<tr>
<td></td>
<td>Delay related to reported regulation 70 10 80</td>
<td>Delay related to reported regulation 51 1 52</td>
</tr>
<tr>
<td></td>
<td>Other procedural obstacles 51 1 52</td>
<td>Other procedural obstacles 1 1 1</td>
</tr>
<tr>
<td>Preshipment inspection and border clearance</td>
<td>3 1 1</td>
<td>Arbitrary behaviour of officials 1 1</td>
</tr>
<tr>
<td></td>
<td>High fees and charges 1 1</td>
<td>High fees and charges 1 1</td>
</tr>
<tr>
<td></td>
<td>Others 1 1</td>
<td>Others 1 1</td>
</tr>
<tr>
<td>Quantity-control measures</td>
<td>3</td>
<td>High fees and charges 3 3</td>
</tr>
<tr>
<td></td>
<td>Charges, taxes and price-control measures 2 3 1</td>
<td>Delay related to reported regulation 3 3</td>
</tr>
<tr>
<td></td>
<td>High fees and charges 3 3</td>
<td>Arbitrary behaviour of officials 1 1</td>
</tr>
<tr>
<td></td>
<td>Delay related to reported regulation 3 3</td>
<td>Delay related to reported regulation 1 1</td>
</tr>
<tr>
<td></td>
<td>Anti-competitive measures 1</td>
<td>Limited or inappropriate facilities 1 1</td>
</tr>
<tr>
<td></td>
<td>Delay related to reported regulation 1 1</td>
<td>Others 1 1</td>
</tr>
<tr>
<td></td>
<td>Limited or inappropriate facilities 1 1</td>
<td></td>
</tr>
<tr>
<td>Distribution restrictions</td>
<td>8</td>
<td>Limit related to reported regulation 8 8</td>
</tr>
<tr>
<td>Export-related measures</td>
<td>30 104 24</td>
<td>Limit related to reported regulation 66 66</td>
</tr>
<tr>
<td></td>
<td>Delay related to reported regulation 66 66</td>
<td>High fees and charges 53 53</td>
</tr>
<tr>
<td></td>
<td>High fees and charges 53 53</td>
<td>Limited or inappropriate facilities 40 40</td>
</tr>
<tr>
<td></td>
<td>Limited or inappropriate facilities 40 40</td>
<td>Others 54 3 57</td>
</tr>
<tr>
<td>Total</td>
<td>47 370 63</td>
<td>622 36 658</td>
</tr>
</tbody>
</table>

Fresh fruits and vegetables

The main horticulture exports of Pakistan include potatoes, dates, mangoes and kinnows. India, Afghanistan, the Russian Federation and the United Arab Emirates are among the major destination markets. Between July 2018 and February 2019, Pakistani fruit and vegetable exports were worth $479 million.\(^2\)

About 62% of the fresh fruit and vegetable exporters that participated in the survey said they had experienced difficulties with non-tariff measures, especially conformity assessment requirements (Figure 25).

Testing and certification: A problem of time and cost

Pakistani fresh fruit and vegetables must be tested and certified according to the requirements of importing countries. For most exporters, the biggest problems are the time and costs they must invest to obtain the required quality and safety certificates.

For instance, exporters find the process of obtaining phytosanitary certificates difficult because of slow processing. The Department of Plant Protection (DPP) issues phytosanitary certificates following field inspections by its officers to verify the quality of the products. Waiting times are long because DPP does not have enough officers. Indeed, interviewed companies said field visits can be delayed by several weeks. In addition, DPP officers sometimes demand informal payments to speed up the process.

Testing for maximum residue limits, carried out by the Pakistan Council of Scientific and Industrial Research, also presents problems for exporters. It can take several days to issue the certificate, during which the quality of the exports often deteriorates. Furthermore, the high fees for this testing are a real burden – for small exporters in particular – especially when the importing countries require certificates for each container.

Figure 25 Testing and certification requirements are tough for most produce exporters


Many exporters also expressed concern about the inadequate export-quality infrastructure in Pakistan. For instance, importing countries require fresh fruit from Pakistan to be treated with hot water to reduce pest or disease infestation. However, few facilities in the country can provide this kind of treatment, and their fees are usually high.

Interviewed companies also mentioned a shortage of facilities offering fumigation and irradiation treatment required by destination markets. One mango exporter said that only one plant in Multan provided irradiation services, which leads to more delays.

**Manual inspection and lack of cold storage create problems**

Customs officials check goods manually because they lack suitable scanners. Manual inspections take a lot of time, which affects the quality of highly perishable fruits and vegetables. In addition, the Anti-Narcotics Force may also check the products. Many exporters have had to pay extra demurrage costs because AFN inspections led to more delays.

Many exporters reported that their shipments were damaged by reckless handling during inspection. Some also remarked that the product packaging was opened for the inspection, but not properly closed. This increases the chance of goods being damaged during transport and displeases buyers, who do not want damaged products or opened packages.

Another problem identified by fruit and vegetable exporters is the lack of sufficient cold storage at the main border points. Several said they used their own diesel-powered refrigerated containers, which is a financial burden that narrows their profit margins.

**Conditions are attached to the duty-free import of corrugated boxes**

Pakistan allows exporters of fruit and vegetables to import corrugated boxes without any duty or taxes, provided they are used within 12 months. Companies that fail to meet this requirement are subject to duties. However, as the kinnow and mango seasons are short, some of the boxes may not be used, resulting in additional costs for exporters. Exporters said this 12-month period should be extended to 24 months so they can use all the boxes they import without having to pay duties.

**Live animals and meat products**

Pakistani live animal and meat exports are valued at $237 million. Meat exports have grown markedly, increasing from $80 million in 2009 to $227 million in 2018, with a peak of $263 million in 2015.²³

Almost 90% of live animal exports from Pakistan are destined for Afghanistan ($8.5 million). But Middle Eastern countries are the main importers of Pakistani meat – notably the United Arab Emirates ($91 million), Saudi Arabia ($37 million) and Kuwait ($36 million).

Yet exporters of Pakistani meat products face many challenges due to the absence of modern meat-processing facilities. Most of the burdensome regulations reported by exporters in the survey relate to conformity assessments required by importing countries (51%), followed by export-related measures (49%). Almost 72% of meat exporters are affected (Figure 26).

**Testing for antibiotic residues**

Many meat exporters reported facing difficulties involving antibiotic residue testing. They said Pakistani laboratories are either incapable of testing all the required parameters of various antibiotic residues or the

²³ ITC Trade Map, 2018.
tests results are unreliable. As a result, high antibiotic residues in their goods have resulted in unpleasant experiences and reputational loss.

*Halal certification*

Exporting to Gulf Cooperation Council countries and other Islamic countries requires a halal certificate. The halal certification agencies in Pakistan are fragmented, and companies said they had difficulties providing the required certificate.

In 2015, the Government decided to establish the Pakistan Halal Authority to promote halal exports. However, this agency is not yet fully functional. Additionally, different importing markets ask for a distinct halal certificate, which imposes an extra burden on the exporter to acquire several halal certificates.

*Strict traceability requirements*

The lack of a traceability mechanism is also a problem for Pakistani exporters. Markets including the EU and the United States require traceability of livestock and meat products to ensure their quality. The fragmented nature of the sector, together with insufficient monitoring and recordkeeping, makes traceability very difficult in Pakistan.

*Pakistan certificates lack international recognition*

The Animal Quarantine Department is responsible for animal quarantine services in Pakistan. An understaffed workforce and inadequate facilities at the agency have caused significant delays for exporters. Additionally, only a few neighbouring countries accept the health certificate issued by the agency. Canada and Saudi Arabia, for instance, refuse to recognize the certificate. As a result, exporters face additional costs to bring technical experts from abroad to Pakistan to visit slaughterhouses and assess production methods.

*Lack of sufficient cold storage facilities at major border points*

Exporters voiced some concerns about the lack of adequate cold storage facilities in airports and at customs points. They believe infrastructure deficiencies have affected the quality of Pakistan meat exports.

*Figure 26 Non-tariff measures hinder most live animal and meat exporters*


---

Mandatory export form and financial regulations create problems

Meat exporters said they struggled to complete the mandatory export form, called the ‘E-form’. When filling in prices on the E-form, exporters must stick to the government-set export price. They cannot choose their own export price for their meat, even if the importing country is willing to pay more. This means exporters are losing profit.

The strict financial regulations imposed by the State Bank of Pakistan are another challenge for meat exporters. For instance, if the value of the shipment declared on the E-form (prior to shipment arrival) does not match the actual value, the company must amend the E-form – something exporters described as a lengthy and complex process.

Rice

Pakistan was one of the top five rice exporters in the world in 2018. Rice exports were valued at about $2 billion that year, accounting for roughly 40% of total agri-food exports. Kenya, China and Afghanistan are the main destination markets for Pakistani rice.

Overall, 55% of the surveyed rice exporters experience difficulties with NTMs (Figure 27). Most of these involve conformity assessment rules, particularly the high cost of certification.

Testing and certification requirements

One of the main obstacles that rice exporters face is testing for maximum residue limits. Some countries require analysis within parameters not covered by the Pakistan Council of Scientific and Industrial Research. As a result, exporters often send samples abroad for testing – usually to the EU or the United States – which means longer processing times and higher costs. Rice exporters also noted a scarcity of suitable labs to carry out the testing for genetically modified organisms required by importing countries.

Figure 27 Regulations and procedures hold back 55% of rice exporters

Exporters have also faced several problems at the destination markets due to the lack of recognition of quality and safety certificates issued by Pakistani labs. When exporting to the EU, rice exporters face challenges in showing that their product is pesticide free, because the tests done in Pakistan are not recognized. In China, Pakistani rice usually must undergo an additional test to show that it complies with the requirements.

**Export inspection**

More than 25% of the regulations that rice exporters find burdensome are linked to export inspection. Companies expressed concerns about difficulties in the shipping process due to long waiting times (up to 10 days) caused by inspections. Additionally, rice exporters feel their goods are vulnerable to damage during inspections. Some said their buyers had received torn bags or damaged rice shipments. Exporters understand that their consignments may have to be opened for inspections, but they want all opened bags to be properly repacked and sealed before they are shipped.

**E-form and banking regulations are taxing**

Like meat exporters, companies that export rice describe the E-form as complicated. Normally, SBP asks exporters to submit many documents together with the form. The authorities are also slow in processing the E-form, they said.

Rice exporters are very concerned about the strict regulations of SBP. If the name of the buyer on the order form and the payment paperwork is not identical (orders sometimes come from one company and the payment via its sister or subsidiary company), rice exporters cannot get the necessary export clearance. They face the same problem if the actual payment amount differs from the estimated amount on the E-form.

**Transport and documentation challenges are common**

Agri-food exporters encountered problems with transport of their shipments. Most commercial freight is transported by road, but the National Logistics Cell trucks and the containers are inadequate. This leads to significant delays, which is a serious problem when exporting perishable goods. Only small quantities are shipped by air because of the high cost for exporters.

Additionally, companies face difficulties exporting to Middle Eastern and North African countries, especially Bahrain, the United Arab Emirates and Qatar, because additional documentation is required. For each shipment, the embassies of these countries must review and verify all export documents. This bureaucratic procedure adds to the costs and waiting time of Pakistani exporters.

Many constraints must be addressed at the production level. High production costs in Pakistan hamper exporters. The spread of plant diseases such as fruit fly and thrips, water shortages and unavailability of quality seeds are among the main concerns of agri-food exporters. Insufficient information on demand in the international markets, in addition to packing and branding problems, hinder Pakistani exports. The lack of modern technology also limits export quality.

**Administrative procedures and high fees: The real problem for food exporters**

Procedures are the biggest impediment to agricultural exports. Even with some of the most frequently reported non-tariff measures, such as technical regulations and conformity assessment, the real problem lies with delays in administrative procedures and high fees, both at home and abroad.

More than 77% of the measures reported by agri-food exporters are deemed burdensome, in part due to procedures. The large majority of these hurdles (90%) result from Pakistani policies.

Most of the reported obstacles (26%) involve high fees and charges for essential export services, such as testing and certification. The current state of the export-quality management system in Pakistan is a major hindrance for agri-food exporters.

Unaccredited laboratories and the refusal of other countries to recognize certificates issued by Pakistani labs are frequently reported problems. While exporters usually avoid these hurdles by sending product samples to laboratories abroad for testing or certification, they find this to be expensive and time-consuming. The
Pakistan: Invisibles barriers to trade

process would be faster and cheaper if the necessary testing and certifications could be done in Pakistani laboratories.

Most procedural obstacles in Pakistan occur at customs, mainly due to the inspections carried out by the Anti-Narcotics Force. Many difficulties related to testing and certification take place at DPP and the Animal Quarantine Department, which is attached to the Ministry of National Food Security and Research.

Manufacturing export challenges

Role of the sector

The manufacturing sector accounts for approximately 12% of Pakistani gross domestic product and employs 35% of the labour force. Pakistani exports of manufactured goods were worth close to $17 billion in 2018, led by apparel and clothing accessories, (31%), textiles (23%) and cotton (20%). The United States, the EU and China are among the major markets for Pakistani manufactured goods.

Almost half of exporters face difficulties with regulations

Of the 694 exporters surveyed from the manufacturing sector, almost half (47%) face difficulties with non-tariff measures and related procedures. The most affected are exporters of goods such as textiles (51%), clothing (50%) and leather products (44%).

Figure 28  Domestic regulations are a big hurdle for manufacturing exporters of all sizes

![Diagram showing types of measures affecting manufacturing exporters by company size]


---

26 World Development Indicators, World Bank (2019).
The import regulations of partner countries cause about 45% of the reported obstacles. Pakistani export policies are the main concern of the manufacturing sector, accounting for more than half of reported regulations (Figure 28). Other measures that affect exporters – albeit on a small scale – include preshipment inspection and other entry formalities (6%), technical requirements (4%) and price controls (4%).

Partner country regulations burden Pakistani exporters

EU countries import the most manufactured goods from Pakistan (39%). They also apply most of the burdensome regulations (41%) (Figure 29). German and British regulations are deemed the most burdensome. Access to Canada and Australia also appears to be difficult, as the share of measures imposed by these two countries exceeds their portion of imports.

In contrast, the United States buys 21% of Pakistani exports and accounts for just 9% of the measures that are considered onerous. Similarly, SAARC countries import 8% of Pakistani manufactured goods while accounting for only 6% of the troublesome regulations.

Proof of compliance poses the biggest challenge

The NTM survey suggests that exporters of manufactured products find it more difficult to prove compliance with technical regulations – through inspection, testing and certification (27%) – than to meet the technical requirements themselves (4%). Exporters have the hardest time proving compliance with EU regulations, followed by US and Chinese rules.

Exporters said most of the problems with conformity assessments are due to the related procedures (84%). In Pakistan, the biggest obstacles in this respect are the lack of international accreditation at laboratories, the refusal of foreign authorities to accept certificates issued in Pakistan and limited testing facilities. High fees and long waiting times are the most common procedural hurdles that exporters face in other countries.
# Pakistan: Invisibles barriers to trade

## Table 3  Manufactured exports – non-tariff measures and why they are burdensome

<table>
<thead>
<tr>
<th>NTM type</th>
<th>Number of cases reported for each measure type and the reason it is burdensome</th>
<th>POs making the measure difficult and where they occur</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Measures are too strict or difficult Due to procedural obstacles Both NTMs and POs are difficult</td>
<td>Type of procedural obstacles faced (POs)</td>
</tr>
<tr>
<td></td>
<td>Number</td>
<td>Number</td>
</tr>
<tr>
<td>Technical requirements</td>
<td>20</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Conformity assessment</td>
<td>130</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>130</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>130</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preshipment inspection and border clearance</td>
<td>1</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quantity-control measures</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Charges, taxes and price-control measures</td>
<td>20</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>20</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>20</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finance measures</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Rules/certificate of origin</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td></td>
<td>12</td>
<td></td>
</tr>
<tr>
<td></td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Export-related measures</td>
<td>38</td>
<td>207</td>
</tr>
<tr>
<td></td>
<td>38</td>
<td>207</td>
</tr>
<tr>
<td></td>
<td>38</td>
<td>207</td>
</tr>
<tr>
<td>Total</td>
<td>82</td>
<td>372</td>
</tr>
<tr>
<td></td>
<td>82</td>
<td>372</td>
</tr>
<tr>
<td></td>
<td>82</td>
<td>372</td>
</tr>
</tbody>
</table>

Pakistan: Invisible barriers to trade

Textiles and garments

About 52% of Pakistani textile and garment exporters face difficulties with NTMs. The main challenges involve the conformity assessment rules of partner countries (25%), followed by tax refunds related to exports (21%) and inspections imposed by Pakistan (14%).

Testing and certification requirements

Limited or unsuitable testing facilities and high fees to have goods tested and certified abroad are the main difficulties for Pakistani exporters. For instance, exporters of gloves and towels said they must have certifications such as the OCO certificate, SA 1400 and BSCI to enter the EU market. Normally, only private labs that are internationally accredited – such as SGS and Bureau Veritas – issue these certificates. Exporters consider the costs for these certifications to be high, especially as they are only valid for a year.

For certain products, testing is required on blast, elongation, strength, puncture, resistance and cut level for fibre. Exporters engage companies such as SDFI of the United States and Ricotest of EU for such tests, which they find expensive.

Another commonly reported issue by exporters of readymade garments is the requirement of the EU and the United States for clothes to be free from harmful chemicals. Exporters consider the charges to obtain this kind of certificate, which is required for each container, to be high.

Pakistani producers normally use traditional dyes to manufacture carpets. However, to access the EU market, carpets must be manufactured using AZO-free dyes. Many Pakistani exporters indicated that while AZO-free dyes are becoming more available in the country, they are not yet readily accessible. Similarly, other partner countries such as Japan and the Russian Federation require the use of new environmentally friendly dyes that are iodized free. These dyes are not available in Pakistan, and importing them is costly.

The requirements of some buyers for compliance with various private standards are also onerous, according to exporters of readymade garments. Some European buyers oblige exporters to provide a GOTS certificate to ensure that the production process complies with social, ethical and environmental norms. Exporters get this certificate from the United States, as no Pakistani agencies issue it.

Preshipment inspections causes delays

Exporters encounter unnecessary delays during customs inspections in several destination countries. These hurdles arise in Canada, Italy and the United States due to the arbitrary behaviour of customs officials and a lack of information about the documents required by these markets. Additionally, Pakistani exporters of handmade carpets face high customs surcharges in China, despite the free trade agreement signed between the two countries.

Domestic regulations and procedures hinder exporters

Pakistani authorities applied 54% of the burdensome measures reported by textile and garment exporters. High costs, delays and administrative procedures related to export subsidies, tax refunds and export inspections make these domestic regulations challenging, they said.

Garment and textile exporters echoed the concerns of agri-food exporters about export inspections carried out by ANF. Their main complaint was that improper handling of goods led to delays and product damage. The inspection can take at least two days, meaning exporters must bear extra demurrage costs and risk missing the booked vessel.

Furthermore, ANF officials typically check consignments manually by unpacking the products. Exporters usually are not allowed to repack their products after the inspection. Foreign buyers have frequently complained that the goods are damaged or some pieces are missing.
Carpet exporters also said it was hard to send samples abroad because Pakistan restricts their weight to 12kg. Handmade carpets are usually heavy, and exporters said they had to pay extra fees for heavier samples.

**Tax refunds can be delayed for years**

Exporters raised several concerns about the export incentive system in Pakistan. The information on the different incentives is not properly published and many documents are required to benefit from these incentives, they said. Even after the paperwork is submitted, there are significant delays before the incentives are granted. Some exporters said they had been waiting several years to get tax refunds, and several had made informal payments to government officials to expedite the process.

Exporters of readymade garments said many buyers in Canada and some European countries prefer to transfer funds through an online system such as PayPal. But these online payment systems are prohibited in Pakistan, so exporters are losing potential clients.

Figure 30  Domestic rules and procedures are the main problem for textile and garment exporters


**Surgical instruments**

Conformity assessment requirements including the high fees and delays associated with the certification required by destination markets are behind 59% of the burdensome measures described by exporters of surgical instruments. Surgical instruments destined for European countries must have MDR certification, but as no facilities in Pakistan can issue such certification, exporters invite foreign experts for field visits to obtain it. This is a lengthy process, and exporters find the associated costs high. They face similar issues obtaining US Food and Drug Administration, ISO 9001 and I.C.E. certifications requested by importing countries.

Surgical instrument exporters also experience difficulties with ANF export inspections and the strict financial regulations imposed by SBP. Additionally, they complained about having to pay duties to reimport their products if they are returned by foreign buyers.
Sports equipment

Conformity assessment requirements are the main technical issues for firms that export sports equipment. This is largely due to the lack of international recognition of the tests performed and certificates issued by public labs in Pakistan. In Australia, cricket bats must undergo an additional fumigation treatment, leading to additional costs for Pakistani exporters.

Exporters of boxing equipment say they encounter long inspection processes and high customs surcharges in Kazakhstan, Kyrgyzstan and the Russian Federation. Meanwhile, cricket bat exporters say Bangladeshi customs values their products at more than the actual price, which means they must pay higher duties.

Difficulties with domestic regulations are mostly linked to the lengthy and complex process of the tax rebate system in Pakistan. Inspections by ANF are also challenging for exporters of sports equipment.

Pharmaceutical products

Most of the difficulties that pharmaceutical exporters encounter are linked to product certification required by importing countries or Pakistan. Some drug exporters cannot meet the strict technical requirement of foreign markets.

Exporting to the United States and the United Kingdom requires FDA certification of conformity, but there are no internationally recognized facilities in Pakistan that can provide this certificate. Similarly, exporters report that Qatar and the United Arab Emirates do not recognize the certificates issued in Pakistan.

To export medicines and lifesaving drugs from Pakistan, exporters must obtain a No Objection Certificate from the Drug Regulatory Authority. Pakistani companies find it difficult to get this certificate because the agency demands a large number of documents.

Likewise, these exporters must obtain a Good Manufacturing Practice certificate from the Drug Regulatory Authority. They need to supply many documents and inspectors from the agency must visit the production site before issuing the certificate. This process can take up to three months.

Pharmaceutical exporters consider the export inspections carried out by ANF and the strict regulations of SBP to be major hindrances.

Manufacturing exporters face difficulties with rules of origin and other issues

Exporting to or transiting in Afghanistan is difficult, Pakistani companies say, primarily because of slow clearance processes, demands for bribes and arbitrary decisions by Afghani customs officials. Pakistani trucks transporting goods in Afghanistan also face restrictions. For example, consignments must be offloaded and reloaded onto Afghani trucks at the border points. Given the tense relationship between India and Pakistan, exporters face similar challenges in India.

Despite the free trade agreement between Pakistan and China, Pakistani exporters encounter obstacles in China. The arbitrary behaviour of Chinese customs officials means local certificates might be refused, even if they are issued by a recognized private laboratory. Exporters also believe they face a longer inspection process in China than traders from other countries. Furthermore, exporters say many Pakistani goods are excluded from the trade agreement, which means they are subject to high Chinese custom duties.

Rules of origin are a bigger problem for exporters of manufactured goods than for agri-food exporters. Some exporters acknowledged that they were unfamiliar with the requirements of importing countries and the documents they demand. As a result, they usually discover at the border of destination markets that they lack a valid certificate of origin. This causes long delays and, sometimes, the consignment cannot be cleared.

Procedures are the main burden for manufacturing exporters

As is the case with agricultural goods, it is often not the regulation per se that is burdensome for exporters of manufactured products, but the accompanying procedures. About 64% of the regulations that were identified as onerous were perceived as such because of the procedures.
Most of these procedural problems occur in Pakistan (79%). The most commonly reported obstacles are delays (37%), high fees for certification and testing (30%), informal payments (8%) and lack of testing and sector-specific facilities (9%).

In foreign countries, the most frequently mentioned procedures are high and informal payments for certificates (60%) and delays (25%). Like exporters in the agricultural sector, companies that export manufactured goods must turn to foreign countries for tests and certification because the facilities in Pakistan are inappropriate or insufficient. This has led to increased costs.

**Importers struggle most with non-technical measures**

A total of 387 importers participated in the NTM survey. More than 90% of the burdensome measures they face are non-technical. The top challenges for importers are finance measures (38%), charges and taxes (30%) and preshipment inspection (18%).

**Figure 31 Finance measures are the biggest challenge for Pakistani importers**

*Source: ITC NTM Business Survey in Pakistan 2019.*

**Payment rules constrain importers**

Restrictions on advance payments have a serious impact on Pakistani importers, who say SBP is inconsistent on advance payments. Foreign Exchange Manual – 2018 dispensed with the facility of advance payment against imports under letter of credit. Subsequently, in September 2018, SBP allowed advance payments of up to $50,000 for imports of life-saving medicines or devices.

As per the latest regulation of January 2019, SBP decided to let authorized dealers effect advance payments of up to $10,000 per invoice, on behalf of importers cum exporters, for imports of raw materials.

---

29 Advance payment of $50,000 or equivalent per invoice.
30 However, the limit for imports against advance payment or on open account basis for essential medicines and devices remained the same ($10,000 per invoice).
and spare parts. For down payments against machinery imports, SBP has allowed up to 20% under the Long-Term Financing Facility financing schemes for exporters.\textsuperscript{32}

In spite of this, many importers need to make advance payments exceeding this limit. Some companies set up offices offshore – in the United Arab Emirates, for instance – for necessary payment formalities. Others have resorted to informal payment systems such as \textit{hundi}.\textsuperscript{33}

Strict implementation of advance payment requirements has also created some difficulties for importers, who have faced challenges at Pakistan customs when the amounts on payment receipts and invoices do not match. Companies say this is usually due to exchange-rate fluctuations or changes in transportation fees between the signed agreement and the arrival of shipments.

Importers face similar problems when the name of the buyer or its location differs on payment receipts and invoices. This occurs when a Pakistan-based company places an order and the payment is made through a subsidiary located in another country.

\textit{Importers find customs valuation ambiguous}

Many importers are unclear about the customs valuation process. Some believe their products have been excessively valued, resulting in higher duties. Ambiguity in this process has led importers to hire clearing agents, which costs them more money.

Importers are also concerned about the high charges imposed on their goods. In addition to customs duties, many products are subject to ‘regulatory duties’. Pakistan imposes a regulatory duty on specific imports that are already produced in the country. Different rates apply depending on the product involved.\textsuperscript{34} For instance, vegetables are subject to a 10\% regulatory duty, while importers of leather apparel and clothing can pay up to 50\% of custom surcharges.

\textit{Inspection process can be long}

Lack of proper warehouse and cold storage facilities at border points is a major problem for Pakistani importers. The customs clearance process takes longer than expected due to the absence of appropriate infrastructure and a shortage of human resources. The arbitrary behaviour of officials and demands for informal payments during inspections are also among the main challenges reported by importers.

Many companies struggle to fill out the import form, known as the ‘I-Form’. Various documents are needed to complete this form, such as bill of entry, receipt of goods, pro forma invoices and insurance. Importers say they need advice on how to fill out this form.

\textsuperscript{32} Para 4 (d) (Annexure), Master Circular – Long Term Financing Facility (LTFF) for Plant & Machinery. Available at: \url{http://www.sbp.org.pk/smefd/circulars/2018/C3.htm}

\textsuperscript{33} \textit{Hundi} is an ancient financial instrument used in trade and credit transactions. It is used as a remittance instrument to transfer money, as a credit instrument or IOU to borrow money, and as a bill of exchange in trade transactions.

\textsuperscript{34} See \url{http://download1.fbr.gov.pk/SROs/20181017110228319SRO-1265(i)-201816.10.2018.pdf}
What are the challenges of women entrepreneurs?

Participation of women in the formal economy is low

Very few women work at Pakistani trading companies and there are few women entrepreneurs in the country. On average, women make up just 4% of the workforce in exporting or importing enterprises (Figure 15). Female employment is especially low at small firms (2%) compared to medium-sized (8%) and large businesses (13%). More than 60% of the interviewed firms employed no women, and women employees made up less than a tenth of the workforce in 80% of the companies.

The share of exporting or importing companies that have a woman as owner and/or manager (defined as women-led) is also very low (8%). These results are in line with the general situation in Pakistan. The average share of female employees in all Pakistani companies is 7.3%. Likewise, women own only 8% of the firms and manage 6%.

Most women work in just a few sectors

Female employment is concentrated in just a handful of sectors, such as textiles and garments. One reason for this is that women lack knowledge of and exposure to other sectors and operating procedures. Another factor is the limited number of dedicated entrepreneur training centres and advisory services for women.

Many female employees engage in activities that are similar to their household duties or which they learned from their families. Textile and garment manufacturing is one of these activities. Readily available raw materials and expertise is another factor that has motivated women to work in this sector.

Similarly, women-led trading companies are also concentrated in just a few sectors. Almost half of the companies that are owned or managed by women are in the textile and clothing sector (45%), followed by the agriculture sector (27%) – exporting fresh and processed food. Another 10% of the firms are in the miscellaneous manufacturing sector, exporting products such as handicrafts. In terms of geographical distribution, more than 90% of the women-led companies are located in two provinces: Punjab and Sindh.

Regulations affect more women-led enterprises

Female entrepreneurs generally experience the same sort of problems with regulations that their male counterparts experience. However, these measures affect a greater share of women-led firms.

Overall, 66% of women-owned exporting companies said they faced difficulties with trade regulations, compared with 51% of men-owned firms (Figure 32). These difficulties are due to overly strict or complex regulations, or because the related procedures make it difficult to comply with the regulations.

Women-led firms struggle with domestic regulations

Pakistani export regulations caused 54% of the problems that women-led businesses had with non-tariff measures (Figure 32). In contrast, difficulties with domestic export regulations made up 45% of the cases of men-led companies. These measures include rules on inspections and export restrictions, as well as hurdles with tax rebates on exports.

---

36 Ibid.
Figure 32  Burdensome regulations affect more women-led exporters than men-led exporters

*Share of companies affected by NTMs is higher among women-led businesses*

<table>
<thead>
<tr>
<th>Types of NTMs companies find burdensome is similar among men-led and women-led businesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men-led companies</td>
</tr>
<tr>
<td>Technical requirements</td>
</tr>
<tr>
<td>Preshipment inspection and other entry formalities</td>
</tr>
<tr>
<td>Finance measures</td>
</tr>
<tr>
<td>Anti-competitive measures</td>
</tr>
<tr>
<td>Rules of origin and related certificate of origin</td>
</tr>
</tbody>
</table>

*Source: ITC NTM Business Survey in Pakistan, 2019.*
Proving compliance with technical requirements is hard

Women-led businesses, like those headed by men, also have serious problems with conformity assessment requirements (38%) such as product testing and certification (Figure 32). In fact, exporters find it harder to prove compliance with regulations than to comply. This is usually due to high costs and administrative hurdles related to conformity assessments. Limited infrastructure and a lack of well-trained staff have contributed to various problems of quality compliance in Pakistan.

Many women-led enterprises are not successful exporters

There are numerous reasons that few Pakistani women-led companies export successfully. While many of these firms export, it is usually on a small scale and through informal channels. As per the NTM survey methodology, such companies were not interviewed because they are not active exporters or are not exporting formally.

To shed light on why many enterprises headed by women have not achieved export success and why some export only informally, women entrepreneurs and experts were interviewed separately on this issue.

Most women-led businesses are informal and small scale

Women-led companies lack the expertise and guidance on how to move from one phase to another in the entrepreneurship process. These businesses are concentrated in a few traditional areas and have limited exposure to the international market. Financial constraints hinder their ability to scale up and enter new markets.

Roughly two-thirds of the women-owned businesses that were interviewed are members of at least one chamber of commerce or association. Another 14% were in the process of obtaining membership.

The current trading profile of these companies shows heavy dependence on informal channels. More than 73% 'export' informally, occasionally and in small quantities. Less than 20% receive payments through bank transfers. Most rely on informal methods such as hundi.

Women entrepreneurs lack good business practices and sufficient understanding of the market demands

Most women-led enterprises are small ventures, and usually they do not have a good or any business plan. They rely extensively on their immediate vicinity to purchase supplies and are not able to manufacture competitive export products.

Few women-led firms understand the demands of customers in the international market because they lack information and adequate guidance. Identifying genuine buyers for their products is a key hurdle. Women entrepreneurs in Pakistan are unable to segment the market and target their buyers. They also do not have the proper skills to engage with customers and market their goods.

In most cases, government departments and chambers are unable to support businesswomen sufficiently in these areas. Although some institutions offer training to promote women-led companies, most are unable to deliver tangible business success due to a lack of follow-up support and guidance.

Production capacity is limited

Because they are small, women-owned enterprises generally do not have facilities for large-scale production. They miss out on economies of scale as a result. These companies typically create handicrafts such as embroidered garments and home linens, so it is difficult to scale up production to fill big orders. Given these
circumstances, women-led businesses are apprehensive about the risks associated with large orders from overseas.

**Lack of access to trade finance holds back businesswomen**

Many Pakistani businesswomen are unable to obtain financing. They lack enough collateral for bank loans and therefore cannot expand production to fill big orders for export or even operate a local sustainable business.

Another concern is the absence of information about financing and loan schemes offered by banks. SBP has implemented policies for loans on easy terms that would probably benefit women-led enterprises. But women entrepreneurs need information and training so they understand how to use these loan schemes.

**Inadequate information is a major obstacle**

Although many women entrepreneurs in Pakistan actively use social media, they do not have sufficient technical skills to search online for information about markets and requirements. Many struggle to fill out simple forms or to interact effectively with foreign customers via e-mail. Their inability to access information limits their capacity for growth.

Some Pakistani businesswomen say they feel overwhelmed at customs because of past experiences and their unfamiliarity with customs regulations and procedures. As a result, they were subject to bribery, harassment and extra costs due to mistakes. Many are wary of cargo agents and prefer to send small consignments abroad through courier services. Payments are usually received not through the banks, but by *hundi*.

Many women also feel that business and trade support institutions are biased against them. Women say they are harassed when approaching these institutions for information due to the lack of gender sensitization among male officials.

**Women are missing out in trade policy formulation**

The true contribution of women to cross-border trade is not documented, because they operate mostly in the informal sector. The Government does not have sufficient data to develop a clear view of the role of women-led enterprises in international trade. As a result, the interests of these businesses are not adequately considered in Pakistani trade policy.

Furthermore, the voices of women are absent when trade policy is formulated. There is a lack of consultation between the Ministry of Commerce and the agencies focusing on women development. While Pakistan has long recognized the need to close the gender gap, few women are involved in economic policy discussions.

Although 17 Chambers of commerce focusing on women are registered with the Directorate General of Trade Organizations, most are still in a nascent stage and have a limited role in formulating trade policy. These chambers also do not yet have the capacity to support their members or help them get market exposure.

**Businesswomen need support and guidance to export successfully**

There is no dedicated and capable organization in Pakistan to properly guide women entrepreneurs from business development to export success. Although the Government, non-governmental organizations and international organizations have arranged training programmes for women, these initiatives are not sustainable because they are limited and irregular. An institution that can guide women and provide regular training programmes is needed.

Many women are unaware of government or other incentives aimed at supporting them. They lack knowledge about trade policies and expertise to benefit from trade opportunities. Informing women and building their capacity to develop their business is an important step to ensure their eventual export success.

Aspiring entrepreneurs should be encouraged to form clusters to share information, seek opportunities and projects to support businesswomen, and attend workshops to expand their capacity and address their issues.
Social constraints need to be addressed

Another important factor that should not be overlooked is the social constraints women entrepreneurs face, including from their immediate family. Balancing their domestic responsibility with their commercial ventures is a huge challenge. Families often do not support the business aspirations of women, and women are prevented from travelling to buy supplies or market their products. Many are also discouraged from formalizing their business to avoid complications with the tax authorities.

Overcoming hurdles

Action is needed on three fronts to tackle the difficulties that Pakistani businesswomen face: (i) improving the general business environment, (ii) eliminating non-tariff barriers that block all trading companies in the country and (iii) addressing issues that prevent women entrepreneurs from exporting successfully.

National regulations and procedures – especially those related to advance payments of imports, tax rebates and export inspection – must be examined and made more business-friendly, especially for women. Changes are needed in export-quality infrastructure and management to make conformity assessment procedures efficient and to improve quality compliance. Better trade information is essential to help Pakistani companies access foreign markets.

Additional targeted assistance is needed to support women entrepreneurs. Pakistan should mainstream gender in trade policy by promoting equitable and inclusive outcomes in export-led strategies. At the micro level, businesswomen must be given access to suitable trade-related information and assistance through capacity-building programmes so they can understand and comply with trade requirements. Better access to financial services is also necessary.
CHAPTER 3  THE PUBLIC SECTOR

Pakistani trade laws and regulations

Most Pakistani laws and regulations governing cross-border trade fall within the ambit of the federal government. Following the 18th constitutional amendment of 2010, however, provincial governments are now responsible for implementing environmental protection and health laws.

The principal regulations governing Pakistani trade include:

The Imports and Exports (Control) Act, 1950

Article 3 of the Imports and Exports (Control) Act, 1950, gives the Government, through the Ministry of Commerce, the authority to prohibit, restrict or otherwise control the import or export of any goods and to regulate all practices and procedures involved in import and export.

The Customs Act, 1969

The Customs Act of 1969 empowers the Federal Board of Revenue to collect duties and other tariffs on imports. Chapter IV bans both the import and export of items that may infringe on intellectual property rights. Section 15 (c) of the act bans the import and export of goods with a counterfeit trademark\(^\text{37}\) or a false trade description\(^\text{38}\) Similar provisions ban the import and export of products that may infringe copyright, layout design or patents. This measure is intended to discourage piracy.

The Pakistan Animal Quarantine Act, 1979

The Animal Quarantine (Import and Export of Animal and Animal Products) Act of 1979 empowers the Government to prohibit, restrict or otherwise regulate the import or export of any animal, class of animals or

\(^{37}\) Within the meaning of the Pakistan Penal Code, 1860 (Act XLV of 1860).

\(^{38}\) As defined in the Copyright Ordinance, 1962 (XXXIV of 1962), the Registered Layout-Designs of Integrated Circuits Ordinance, 2000 (XLIX of 2000), the Registered Designs Ordinance, 2000 (XLV of 2000), the Patents Ordinance, 2000 (LXI of 2000), and the Trade Marks Ordinance, 2001 (XIX of 2001).
animal products likely to introduce disease to other animals, animal products or humans. Section 3 explains that the act shall be applied as though it were part of the 1969 Customs Act.

In addition to the quarantine officer created by this act, customs officers also have jurisdiction over animal imports. The act empowers quarantine officers to set testing and certification requirements, destroy animal products that they find to be contaminated and deport unsatisfactory imports at the expense of the exporter.

The Pakistan Plant Quarantine Act, 1976

The Plant Quarantine Act instructs the Government to set quality controls on imports that could infect plants and their products. Section 3(1) empowers the Government to restrict or otherwise regulate the import of any article/class of articles likely to infect any crop/plant, or of any pest/class of pests.

Plant Protection Rules 14–28 restrict the importation of 14 products into Pakistan from countries that have had instances of pest or disease infestation. The controlled items are potatoes, rubber, sugarcane, tobacco, citrus plants, coffee plants, bananas, coconuts, groundnuts, maize, tea, onions, garlic, shallots, soil, compost and cotton. These goods are not restricted entirely, but are only banned from countries where specific infestations have been recorded or suspected. Under the Plant Quarantine Act, the Department of Plant Protection has considerable discretion to decide whether an imported item is infested and whether it should be destroyed, disinfected or deported.

The Pakistan Standards and Quality Control Authority Act, 1996

This act established the Pakistan Standards and Quality Control Authority, which is responsible for setting standards for exports from and imports into Pakistan. Section 8 specifies the powers of PSQCA, including the creation and implementation of tests, the granting and withdrawal of licences, the establishment of voluntary and mandatory standards, and registration of inspecting agencies, inter alia.

PSQCA has adopted 15,000 standards from the International Standards Organization (ISO) and 6,000 standards from the International Electrotechnical Commission. It has developed 5,764 additional standards through its Standards Development Centre.

The Drugs Act, 1976, and the Drug Regulatory Authority Act, 2012

Under section 4(2) of the Drugs Act, the Government may direct that a drug or class of drugs cannot be imported or exported save for the issuance of a licence, official order or registration in accordance with rules or through a government agency. The Government can also prohibit the import or export of any drugs.

The Drug Regulatory Authority Act, 2012, created the Drug Regulatory Authority. It also bans several items under its second schedule. These include any unregistered therapeutic drug not in conformity with the registration dossier and associated pharmaceutical evaluation or in contravention of any of the provisions of this act or rules, and any drug that is dangerous to health even when used according to prescribed usage. The restrictions in this act have been incorporated into the Import Control Policy.

The Import Policy Order, 2013

Under section 21 of the Import Policy Order, 2013, the Federal Government may, where it deems it to be in public interest, suspend for a specified period or ban the import of any goods from all or any source.

The Export Policy Order, 2016

The Export Policy Order, 2016, provides the rules on exports and conditions that may be imposed. Schedule I contains the list of the goods that cannot be exported and Schedule II lists the exports that are subject to conditions.

Business associations identify trade policy shortcomings

More than half of the business associations in Pakistan (55%) believe the country has not made satisfactory progress on trade policy and trade agreements (Figure 33). Among the main problems they identified were the difficulties that changing and uncertain trade policy have created for traders. Traders and stakeholders are not properly consulted when Pakistan develops trade policy or negotiates trade deals, according to
business associations. Also, companies are expected to adjust to the new realities when a new policy or a trade agreement is implemented, which is not always easy for them to do or in their best interest, they said.

Figure 33 Most business associations are unhappy with progress on trade policy and agreements


Business associations also criticized the inability of the Government to reduce the heavy reliance of the country on imports (compared to its export volume).

The issues highlighted by business associations mirror those brought up by exporters and importers on policies such as advance payment requirements and burdensome procedures for tax rebates that have affected a large number of companies.

The associations consider the China-Pakistan Free Trade Agreement to be one of the major achievements of Pakistani trade policy. They believe the country negotiated better terms with China and facilitated the import of raw materials for manufacturing.
Pakistan Customs

The responsibilities of the Pakistan Customs Service range from revenue collection to helping smooth trade. Its key responsibilities include:

Revenue collection
The Federal Board of Revenue collected about $27.8 billion in revenue in 2018, of which $4.4 billion (almost 16%) was through the collection of customs duties.39

Controlling smuggling
Pakistan Customs seeks to control the smuggling of goods, especially along the country’s long and porous border with Afghanistan.

Averting trade in counterfeit and pirated goods
The customs administration, in collaboration with other government agencies, imposes strict controls on the import and export of pirated goods and software in any form.

Enforcement of customs laws
The customs service enforces the Customs Act, 1969, as well as a number of related laws such as the Imports and Exports (Control) Act, the Drugs Act and the Quality Control Act.

Narcotics Interdiction
A variety of narcotics are manufactured in the region and smuggled through Pakistan, and Pakistan Customs aims to foil such attempts.

Trade facilitation
Pakistan Customs seeks to introduce and implement policies that help facilitate trade. Pakistan is a contracting party to the revised Kyoto Convention as well as WTO Trade Facilitation Agreement.

Challenges

Some of the biggest constraints at Pakistan Customs that need to be addressed include:

Customs needs a skilled workforce
Pakistan Customs lacks enough skilled workers to effectively carry out the responsibilities of the administration. Its export collectorate currently functions with only 50% of the authorized operational staff, which compromises efforts to facilitate and monitor exports. The customs service has initiated a recruitment process to increase its workforce.

Furthermore, as many experienced officials are expected to retire in the coming years, efforts are underway to ensure that a skilled workforce is in place by 2020. To reach this goal, the Directorate General of Training and Research has been enlisted to train officers at all levels.

Customs procedures and system lack harmonization
The amount of time required by customs, ANF and terminal operators to carry out their tasks is generally lengthy and must be shortened. The absence of a formal coordination mechanism at the level of each collectorate that carries policy approval at the highest level is a major hurdle. Inter-agency coordination with well-defined protocols and standard operating procedures are required so that exporters have a single-window facility at ports. Terminal operators must also upgrade cargo-handling facilities and infrastructure.

Pakistan Customs will continue to struggle to meet the needs of traders and effectively facilitate trade unless it streamlines and harmonizes its procedures and system. The customs service has initiated plans to set up a sustainable computerized system, develop an effective risk-management organization and strategy, and create an electronic single window to address these issues.

Global customs networks offer some answers

Complex problems such as security of supply chain, money laundering and transfer pricing have emerged as key challenges to international trade. Pakistan Customs should be ready to tackle these issues.

An e-customs network is a viable remedy to meet these twenty-first century challenges, and Pakistan has embarked upon this initiative. Pakistan Customs has met with customs authorities in neighbouring countries including China and the United Arab Emirates to exchange seamless data on a real-time basis.

Karachi Export Processing Zone needs better infrastructure

The absence of suitable infrastructure at the Karachi Export Processing Zone is a challenge. The zone needs to be upgraded with modern weighbridges and scanners. Proper examination yards, access points/roads for the movement of containers outside the zone, waste disposal and auction facilities are also necessary.

How do officers at Pakistan Customs perceive exporters and importers?

Discussions were held with customs field officers to obtain first-hand information about their interaction and experiences with Pakistani exporters and importers. Their inputs are summarized below.

Customs officers say exporters have been quick to make use of government incentives. Exporters have used export facilitation schemes – such as export-oriented units, the manufacturing bond scheme and the Duty and Tax Remission for Exporters initiative – to reduce the cost of inputs for production of their goods and to improve the quality of products by modernizing their manufacturing facilities by importing capital goods for less money.

Customs officers believe exporters are generally law-abiding, thanks in part to the low number of contraventions committed by the exporters. Most Pakistani exporters and clearing agents comply with procedural and legal requirements, though they need more education about customs rules and procedures and the provisions of the import and export policy orders.

Field officers in the customs service see their role as service-oriented towards importers and exporters. They say they aim to provide maximum facilitation to all bona fide traders.

What are the common difficulties and conflicts with exporters and importers?

The Government has focused on trade-based money laundering and, as a result, Pakistan Customs is watchful for misinvoicing. In the case of exports, shipments may be misdeclared by undervaluing the commodities, shipping to a transit destination and reissuing a new declaration with actual values for the final destination. This practice means that only a fraction of the foreign exchange is remitted to Pakistan and a major part of export proceeds is retained in the third country.40

When customs officers determine that a declared value is not correct, the exporter is asked to prepare E-Form for the value differential. Customs officers say exporters tend to resist submitting an additional E-Form, arguing that it creates a hardship for them and that their value is fair. Pakistan Customs expects this issue to arise more frequently (and to create more friction with exporters) in the future because of increased customs watchfulness for underinvoiced exports.

Officers occasionally find packing of export consignments to be unhygienic and substandard. They also find that many exporters are unaware of the importance of fumigating goods as well as wooden boxes for SPS reasons.

When it comes to imports, many consignments are released without any issues through the Green Channel of Customs Computerized System – WeBOC Glo. Disputes between importers and customs usually centre

40 See https://fp.brecorder.com/2019/06/20190615486449/
on the valuation and tariff classification of goods, and a proper redressal mechanism is available. Any importer who objects to the decision of a customs officer can file a request of review before the principle appraiser and a second review before the assistant collector.

Traders, their managers and clearing agents often have a poor understanding of the law, according to customs officers. Sometimes, traders are unprepared and do not file the obligatory documents, they said, and recordkeeping and maintenance of accounts is often not up to the mark. Improper or non-filing of detailed goods declarations has caused difficulties during the examination and assessment stages.

Export inspections are delayed for different reasons

Exporters complain about the way ANF carries out inspections, especially delays and damage caused to products or packaging. In response, customs officers noted that ANF faces tough challenges to thwart the smuggling of narcotics, making its task critical.

Customs can only examine and release consignments that are cleared by ANF, so delays are inevitable. The WeBOC system is not able to record and monitor how much time customs officers and ANF each need to clear export cargo.

Several issues make it difficult for ANF to work efficiently, such as containers not being grounded in time and substandard packaging. In addition, the amount of time between port entry and loading onto ships is often insufficient, machinery for reloading bulky or heavy cargo is unavailable, and the documents sent to the agency sometimes contain errors.

Customs takes steps to improve its operations

Customs modernization

Pakistan Customs recently completed several diagnostic studies to identify ways to upgrade the customs administration. These exercises pinpointed strengths, weaknesses and areas of opportunity as well as proposed actions that have helped shape the strategy of Pakistan Customs to modernize and improve its operations. These have contributed to improvements in areas such as customs risk management, post-clearance audit, customs valuation, legal updating of current customs laws and strategic planning.

The Integrated Transit Trade Management System is another important customs modernization initiative. The current infrastructure for land crossings in Pakistan is inadequate for the efficient management of border processes. To remove key bottlenecks to the movement of goods, the Government began a project to build new infrastructure and facilities at the Torkham, Chaman and Wahga border posts. The project is expected to substantially improve border-crossing operations and trade between Pakistan and its neighbours.

Pakistan has committed to facilitating the smooth flow of international trade in accordance with the provisions of the WTO Trade Facilitation Agreement. Pakistan Customs has begun several projects – including an authorized economic operator programme – to ensure compliance with the Agreement for expeditious clearance of exports and imports.

National single window implementation

Pakistan Customs launched the National Single Window Project with the objectives of:

- Making it easier to submit information to the government.
- Cutting costs through a single submission and lower fees to prepare documents.
- Reducing the interaction of traders with multiple government agencies – combined response on release, coordinated inspection, etc.
- Saving time, leading to decreased costs in carrying inventory.

---

41 Based on Trade Dispute Resolution Organization field visit report to Karachi port.
Other improvements

To enhance export and import procedures, Pakistan Customs has:

- Issued standard operating procedures to streamline the issuance of certificates to exporters and facilitate refunds of local taxes from the State Bank of Pakistan.
- Arranged round-the-clock clearance of export cargo.
- Ensured the constant fine-tuning of export modules, after receiving feedback from all stakeholders, by sending change requests to the Directorate of Reforms and Automation. Customs expects recent changes in export facilitation schemes, including complete automation of Duty and Tax Remission for Exporters processes, to help expedite exports.
- The Model Customs Collectorate (MCC) Exports Karachi is developing new WeBOC modules so the system can be launched in port areas that are now being handled through One Customs, i.e. East Wharf, NMB Wharf and Oil Terminals.
- Streamlined procedures allowing importers to submit original certificates in advance, without a formal message from the WeBOC system.
- Ensured customs examination of goods on the same day.
- Upgraded the customs laboratory by procuring the latest testing equipment.

Business associations see a need for better customs procedures

Opinions among business associations are divided on how much Pakistani customs procedures have improved. Half believe the efforts made over the last five years have not been satisfactory, while the other half say it has been satisfactory. About 20% rate the progress to date as good (Figure 34).

Figure 34 Half of business associations are satisfied with improved customs procedures


The main complaints of business associations about customs are complex procedures, multiple taxes, inspections and damage to products. To remain competitive, many traders smuggle goods or submit invoices with prices that are higher or lower than what they intend to charge clients.

The absence of adequate equipment at borders, such as large scanners and cooling facilities, is also a major hurdle for traders, business associations say.

The development of the WeBOC system has been the biggest improvement vis-à-vis customs procedures, according to these associations. Many manual processes have been moved to the automated WeBOC portal, which has made the process easier and more efficient. Pakistan has applied parts of WeBOC and continues to work towards full implementation.
Export-quality management and infrastructure

Standards setting

The Pakistan Standards and Quality Control Authority is responsible for developing and publishing standards. The authority is a member of the International Standards Organization and the International Electrotechnical Commission, and it also liaises with the WTO on TBT-related issues.

PSQCA is involved in inspections, testing and product certification. It also administers mandatory standards, about half of which concern food items. PSQCA controls around 40 food items listed in a mandatory items list notified through the Gazette of Pakistan.

Following the 18th Amendment Act of 2010, the regulatory control of food safety and quality became the responsibility of provincial governments. The national standards formulated by PSQCA for rice, fruit, vegetables and meat can be used voluntarily as a reference standard while finalizing the terms of business contracts. The responsible provincial food safety authorities control the quality of food for each province.

Conformity requirements in Pakistan differ for local sale and export.

Accreditation

The Pakistan National Accreditation Council is the lead agency for accrediting public and private sector bodies that offer conformity assessment services. The council’s accreditation scheme provides official recognition of the integrity and reliability of an inspection body’s services. This accreditation scheme aims to upgrade the standard of inspection activities to support sound decision-making with regard to safety, performance and reliability.

In 2004, the council initiated the ISO/IEC 17025 accreditation of laboratories, which establishes the general requirements for the competence of the testing and calibrations of laboratories. As a member of the Mutual Recognition Arrangement of the Asia Pacific Laboratory Accreditation Cooperation and the International Laboratory Accreditation Cooperation, more than 70 countries recognize testing reports issued by laboratories that are accredited by the Pakistan National Accreditation Council.

Accreditation under ISO 17025 is voluntary. However, global expectations and stricter trade requirements have been a driving force for laboratories to obtain this accreditation. The Pakistan National Accreditation Council certifies laboratories that work in the fields of microbiological, chemical, food, construction and construction products, electrical, environmental, textile, petrochemical and pharmaceutical testing. To date, the council has accredited 152 Pakistani laboratories in these fields.

Inspection bodies for food and textiles export

Accredited inspection bodies in Pakistan offering preshipment inspection services for export consignments comply with ISO 17020:2012. This conformity assessment standard specifies requirements for the competence of inspection bodies and for the impartiality and consistency of their activities. Bodies that inspect rice consignments also are capable of classifying and grading quality.

In addition, a few other preshipment inspection bodies that check rice and textile consignments are not accredited by the Pakistan National Accreditation Council. However, they are legal entities working under Pakistani regulations.

---

42 See https://www.iso.org/standard/52994.html
43 For example, Control Union Pakistan, Bhombal and Co. Surveyors, Pakistan Inspection Company, etc.
Table 4 Inspection bodies active in food and textile trade

<table>
<thead>
<tr>
<th>Laboratory</th>
<th>Inspection accreditation status (ISO 17020:2012)</th>
<th>Laboratory accreditation status (ISO 17025:2012)</th>
<th>Types of items inspected</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Bureau Veritas Pakistan (Pvt.) Ltd (Karachi)</td>
<td>✔️</td>
<td>✗</td>
<td>Grain (wheat, rice, corn, pulses); cereals</td>
</tr>
<tr>
<td>2 BV Consumer Products Services Pakistan (Pvt.) Ltd (Lahore)</td>
<td>✔️</td>
<td>✔️</td>
<td>Textile and textile products</td>
</tr>
<tr>
<td>3 Inspectorate Pakistan (Pvt.) Ltd, (Karachi)</td>
<td>✔️</td>
<td>✗</td>
<td>Livestock, meat, grain (wheat, rice, corn, pulses, oilseeds), food and beverages, textiles and textile products, general manufactured goods</td>
</tr>
<tr>
<td>4 Baltic Control Pakistan (Pvt.) Ltd (Karachi)</td>
<td>✔️</td>
<td>✗</td>
<td>Grain (wheat, rice, corn, pulses), grain products (cereals, snacks, bakery items), cotton fibre, general manufactured goods</td>
</tr>
<tr>
<td>5 TTI Inspections Pvt. (Lahore)</td>
<td>✔️</td>
<td>✔️</td>
<td>Textiles and textile products</td>
</tr>
<tr>
<td>6 Pakistan Standards &amp; Quality Control Authority (PSQCA) Standards Development Centre (Lahore)</td>
<td>✔️</td>
<td>✔️</td>
<td>Livestock, butter, food for infants, crops, wafer biscuits, biscuits</td>
</tr>
<tr>
<td>7 SGS Pakistan (Karachi)</td>
<td>✗</td>
<td>✔️</td>
<td>Food items, textiles</td>
</tr>
<tr>
<td>8 Intertek Pakistan (Pvt.) Ltd (Karachi)</td>
<td>✗</td>
<td>✔️</td>
<td>Food items, textiles</td>
</tr>
</tbody>
</table>

Rice exports

Preshipment inspection bodies draw rice samples and hand them over to laboratories for testing and analysis. Although most Pakistani labs have a limited scope of analysis, many offer a wide range of services to ensure the quality and safety of the rice crop. Some of the key sets of analysis for rice exports include:

- **Physical analysis**: Representative rice samples are manually segregated based on their physical characteristics, grade and colour.
- **Mycotoxins**: Liquid chromatography, thin-layer chromatography and ELISA techniques are used to determine the presence of toxins in rice including aflatoxin (B1, B2, G1, G2), Ochratoxin A, deoxynivalenol and fumonisins.
- **Pesticide residue analysis**: Chromatography is used to analyse the maximum residue levels of pesticides.
- **Heavy metals**: Inductively coupled plasma mass spectrometry (ICP-MS) and atomic absorption photometer techniques are used to determine whether rice has been contaminated by arsenic, cadmium, mercury, lead and other heavy metals.
- **Testing for genetically modified organisms**: A real-time polymerase chain reaction test is used to detect whether rice has been genetically modified.
- **Nutritional facts**: Tables showing nutritional facts are mandatory on consumer packing in many countries. A nutritional analysis of the sample is required, covering energy, carbohydrates, fat, protein, dietary fibre, vitamins and minerals. Leading laboratories of Pakistan are able to do this analysis.
- **Other tests**: Starch content (polarimetric), amylose content and whiteness are a few of the examples of rice tests that may be required for specific purposes.
Eleven accredited laboratories, seven of which are public, offer rice-testing services in Pakistan. Eight non-accredited labs, three of which are public, work in a similar domain.44

The Pakistan Council of Scientific and Industrial Research in Karachi offers the widest range of rice testing and analysis, including for genetically modified organisms, pesticides and heavy metals, as well as nutritional profiling. It issues test reports to declare any consignment ‘fit for human consumption’ based on microbiological and mycotoxin analysis.

The Pakistan Council of Scientific and Industrial Research in Lahore is located in the heart of Pakistan’s rice-producing region and attracts many requests, especially for mycotoxin and microbiological analysis.

Other public laboratories, such as the Industrial Analytical Center, ICCBS Karachi and the Grain Quality Testing Lab, also draw a huge number of rice exporters in need of certificates of quality and SPS compliance. SGS and Intertek, which offer a range of services on quality certification and preshipment inspection assessment, are the most well-known private labs.

Some laboratories also specialize in a specific domain:

- The National Institute for Biotechnology and Genetic Engineering focuses on testing for genetically modified organisms;
- The Nuclear Institute for Agriculture and Biology conducts varietal research in the field of nuclear technology;
- The Rice Research Institute offers varietal identification services;
- The Trading Corporation of Pakistan provides varietal certificates for brown rice;
- Romer Lab is well known in the field of mycotoxin analysis;
- Qarshi Lab and Global Lab work on nutritional profiling.

Public labs compete with private sector labs. Public laboratories also operate as third-party service providers under agreements with private labs.

**Fruit and vegetable exports**

It is the responsibility of either the Department of Plant Protection or the consignee to draw the samples from fruit and vegetable consignments, as per the contract conditions or prevailing quarantine law. Ten accredited laboratories, six of which are public, offer testing service for fruit and vegetables. A few non-accredited public labs are also active in this domain.45

The pesticide residue limit is the most common SPS criterion that is controlled for fruit and vegetable export consignments. Compliance certificates issued by public sector labs can attest that the products satisfy the requirements.

The Pakistan Council of Scientific and Industrial Research (Karachi), the Industrial Analytical Center, ICCBS Karachi and the Grain Quality Testing Lab (Karachi) offer these testing and analysis services in Sindh and Balochistan provinces. Similarly, the Nuclear Institute for Agriculture and Biology (Faisalabad) and Pakistan Council of Scientific and Industrial Research labs (Lahore and Peshawar) offer services in the Punjab and KPK regions. Heavy metal, microbiological and nutritional analysis services are available at all of these labs.

Public sector labs are prominent in the fruit and vegetable testing sector. Samples must be analysed quickly because these crops are perishable. Private sector labs also offer other services, such as nutritional profiling, in addition to the testing and certifications required by DPP.

**Meat exports**

The Animal Quarantine Department checks exports of meat and related products at exit points. A large proportion of Pakistani meat exports is chilled meat, which has a short shelf life, so time-consuming lab

---

44 See Appendix V for a list of laboratories operating in Pakistan that offer rice-testing services and the various parameters they cover.
45 See Appendix V for a list of Pakistani laboratories that offer services in horticulture testing and the parameters they cover.
Pakistan: Invisible barriers to trade

analysis is not feasible. Several labs in Pakistan offer quality-testing services for meat consignments. A few laboratories specialize in disease control in the poultry and livestock sectors.46

While AQD controls SPS compliance for exports, provincial food authorities regulate the quality and safety of meat sold on the domestic market. These activities are usually handled by the food authority’s own laboratories or through third-party service providers.

Textile and fabric exports

Both private and public labs offer chemical and physical testing services to the textile and fabric industry. These laboratories are mainly concentrated in Karachi, Faisalabad and Lahore. The leading laboratories, which are accredited by the Pakistan National Accreditation Council, carry out a wide range of testing.

Some of the major categories for textile and fabric analysis include: Fibre composition and analytical testing; dimensional changes and appearance; color fastness; physical and performance testing; fabric construction; special finishes; moisture management; yarn testing; and flammability and burning behaviour.

Preshipment inspection bodies are responsible for ensuring that the quality of a product meets the requirements of the buyer. These bodies are designated in the initial contract. As frequent visits to the factory and on-site inspections are mandatory, public sector labs are rarely active in this sector. However, some public laboratories (for example, Pakistan Council of Scientific and Industrial Research labs) can conduct some testing work from small PSI bodies textile business operators without their own testing facility.

What treatment facilities are available in Pakistan

Irradiation

The Pakistan Atomic Energy Commission has established several irradiation facilities, such as the Nuclear Institute of Food and Agriculture in Peshawar, that can be used by exporters. Since the commission began offering radiation and sterilization services in Lahore more than a decade ago, commercial gamma irradiator facilities for sterilization have grown in Pakistan.47 Private sector companies have also started to provide food irradiation services, especially for legumes, spices and fruit. In 2015, a private sector joint venture set up a pioneering e-beam facility for fresh fruit and vegetables in Karachi.48 More facilities have been established since then, with donor support.49

Fumigation

Several fumigation facilities are available, registered under DPP. For instance, SGS Pakistan provides fumigation services for stored goods, cargo and shipments, as well as disinfection services for food and beverages.50 Pak Fumigation System (Lahore) provides pest- and damage-control services for goods and cargo, as well as a heat-treatment facility for wood-packing materials.51 Pakistan Pest Control (Karachi) fumigates raw materials, cargo containers and wood packaging.

Vapour heat and other treatments

Pakistan Agro-tech Company, a subsidiary of the Pakistan Agricultural Research Council, has a vapour heat treatment plant for fruits and vegetables.52 Private companies such as Universal Trading Corp. also have vapour heat facilities to treat fruit and vegetables. Several produce exporters have their own treatment facilities, such as steam treatment plants, blast chillers and cold storage.53

46 See Appendix V for a list of Pakistani laboratories that offer services in meat testing and the parameters they cover.
47 See http://www.foodirradiation.org/pages/fandv_countries/Pakistan.html
49 See https://www.thenews.com.pk/print/1187206)
51 See http://www.pakfumigation.com/index.html#services
52 See https://www.dawn.com/news/1187206)
53 All Pakistan Fruit & Vegetable Exporters, Importers & Merchants Association (http://www.pfva.net/)
Availability of trade-related information

Information is essential

Lack of information is one of the major market access barriers for Pakistani traders, especially new enterprises. The first step for exporters to enter the international market is to understand the necessary requirements. They also need to know how to fulfil those requirements.

The following section examines the current landscape of trade-related information available online.

Mapping the availability of trade-related information online

### Trade statistics

- **State Bank of Pakistan**
  - Export and import of goods by commodity and country (in PDF format).
  - Latest information available: September 2019 (exports), June 2019 (imports).

- **Federal Board of Revenue**
  - Import and export search available by commodity and country.

- **Trade Development Authority of Pakistan**
  - Monthly advance release (provisional) and yearly trade statistics reports.
  - Latest available: September 2019

### Trade agreements and preferential access

- **Ministry of Commerce**
  - Regional and bilateral trade agreement texts available.
  - Information related to US and EU Generalized System of Preferences schemes is available in the form of FAQs.

### Customs tariffs

- **Federal Board of Revenue**
  - Provides custom duties levied on each product (in PDF format).
Pakistan: Invisible barriers to trade

Non-tariff measures

Ministry of Commerce (MoC) ● Federal Board of Revenue (FBR) ● Ministry of Climate Change (MoCC) ● Ministry of National Food Security and Research (MNFSR)

Includes statutory text of Import Policy Order 2016 and Export Policy Order 2016, statutory regulatory orders and Foreign Exchange Manual. Further details related to statutory amendments of the import and export policy orders, regulatory changes involving specific products including SPS/TBT regulations, pre-shipment inspection, product regulations, export/import bans, exemption from customs duties, the currency in which export/import is allowed, and statutory amendments providing for incentives for export/import.

MoC: http://www.commerce.gov.pk/sros/
FBR: https://www.fbr.gov.pk/categ/imports-exports/51149/70850/131173
MoCC: http://www.mocc.gov.pk/policiesDetails.aspx
MNFSR: http://www.mnfsr.gov.pk/

Technical Barriers to Trade (TBT) notification

Pakistan Standards and Quality Control Authority

Information on Pakistan’s TBT notifications submitted to WTO.
http://psqca.com.pk/NEP/%5b2%5d%20Pakistan%20TBT%20Notification.htm

Customs clearance system

Web Based One Customs (WeBOC 1) - Federal Board of Revenue

WeBOC 1 is FBR’s online system for filing goods declaration forms for import and export cargo, which can be used by importers, exporters and customs clearing agents.
https://fbr.gov.pk/categ/customs-tariff/51149/70853/131188

Export and import general manifests

Federal Board of Revenue

The Export General Manifest (EGM) and Import General Manifest (IGM) of FBR contain information from Karachi Port and Karachi Port Qasim. It provides information on companies exporting or importing through the ports and the details about their goods.
EGM: http://o.fbr.gov.pk/newcu/egm/egm.asp
IGM: http://o.fbr.gov.pk/newcu/igm/igm.asp

Market price Information

Pakistan Bureau of Statistics

Provides wholesale price indexes by major groups and commodities.
http://www.pbs.gov.pk/cpi
### Business contacts

**Pakistan Exporters’ Directory – Trade Development Authority of Pakistan**

The directory maintained by TDAP is based on data extracted from Pakistan Customs’ records. It aims to assist foreign buyers in sourcing their requirements from Pakistan. Provides exporter profiles including products, export performances and contact information. Offers an elaborate search facility to users based on following key parameters: Harmonized System code, product category and company name.


### Trade leads

**Trade Development Authority of Pakistan**

Shares information related to potential business opportunities that might be released in the form of tenders.


### Trade finance

**State Bank of Pakistan**

Information on various SBP incentive schemes.


### Trade remedies

**National Tariff Commission**

Provides information about the imposition of anti-dumping, safeguards and countervailing duties in the form of notices (in PDF or word format). Includes pertinent rules and procedures related to trade remedies. Offers information about relevant trade remedy investigations, segmented by notices, reports and reviews.

[https://ntc.gov.pk/](https://ntc.gov.pk/)

### Export processing zones

**Export Processing Zones Authority**

Provides details about incentives accorded to exporters and investors and the related application procedures.

[http://epza.gov.pk](http://epza.gov.pk)
Information on national trade regulations is not business-friendly

Different ministries and governmental bodies provide information about trade regulations through their websites. This information is usually available in PDF or Word formats. Relevant changes to regulations are alerted through statutory regulatory notifications in PDF or Word formats. It is quite cumbersome for exporters and importers to search for the relevant regulations that apply to their products in PDF and Word formats.

Traders would have to go through all the published statutory regulatory notifications to determine if any changes had been made to regulations that concern their goods. Moreover, exporters may not know whether a particular regulation is relevant, as some of them do not provide the related Harmonized System or national tariff line classification code to which the regulation applies.

Benefits of trade agreements must be better communicated

The Ministry of Commerce provides a list of trade agreements with their statutory texts. However, it is difficult for exporters to ascertain the benefits these agreements offer because the statutory texts are complex. This is especially true in the case of SMEs, which cannot afford to hire trade experts to explain how they could benefit from a trade agreement.

Preferential tariff rates are determined based on product-specific rules of origin. Moreover, traders need to obtain certificates of origin to profit from a tariff concession. Without easily understandable information, the benefits that could be gained through a trade agreement may not be realized. Exporters should be given the latest information on duty savings, detailed rules of origin requirements and certification procedures so they can make the most of trade agreements.

Scattered information, no trade information portal

The fragmentation of information on different websites is an important issue that must be addressed. To realize the full trade potential of Pakistan, exporters need the pertinent information that different government bodies disseminate in various forms.

To support Pakistani exporters and importers, a cumulated database providing information about goods and destination markets should be designed to enable traders to search for the regulations that are relevant to their particular products.

Trade information and capacity building have improved

Business associations find that a fair amount of progress has been made in Pakistan to improve trade information and build the capacity of companies. Although 30% were dissatisfied with the efforts made over the last five years, 30% reported good or excellent progress and 40% said progress had been satisfactory (Figure 35).

One of the biggest obstacles in this area is difficulty following the various changes and new developments that take place (as trade policy and tax laws are frequently updated). Although policy information is made available online through the Federal Board of Revenue website, it is difficult for traders to understand how it is interpreted, how it applies to them and the implications for their businesses. This information contains references to various statutory regulatory orders, acts and ordinances, and the legal language itself is difficult to comprehend.

The Federal Board of Revenue has updated its information portal, which now offers more information about taxes and rebates. However, it still has a long way to go before it is as useful as it should be, because the information that is made available is too complex for companies to digest and is not industry-specific. There is no segregated data on exports, forecasts, trends and indexes.

Web portals of other government agencies are not up to date and businesses have observed that the procedures typically differ from those shown on the website.
Figure 35  Most business associations say availability of trade information has improved

CHAPTER 4  RECOMMENDATIONS

The NTM survey reveals various obstacles, especially in relation to export-quality management and infrastructure that must be addressed to make it easier for Pakistani traders to comply with regulations.

The following policy recommendations followed consultations with stakeholders from the public and private sectors, business association representatives and experts. These recommendations are also in line with ITC’s action plan aimed at supporting small businesses in developing countries affected by the COVID-19 crisis.\(^\text{54}\) The survey results and recommendations aim to help the government and private sector create an enabling environment for private-sector development and improve export competitiveness in Pakistan.

**Improve transparency in trade**

Access to trade and market intelligence is critical to export success. However, companies in Pakistan often lack the resources and skills to obtain and process trade-related information. This places exporters at a disadvantage compared with competitors in other countries.

*Develop a business process guide*

Pakistan needs a reliable source and proper dissemination of information for exporters and importers. A business process guide should be developed for the trade information portal. This tool should make it easy for exporters that are unfamiliar with the process involved – especially newer companies – to understand the way forward.

The guide should list administrative procedures related to compliance with regulations (e.g. certification of origin, export and import registration) for different products. It should also include other necessary details, such as costs and waiting time.

Implement and train entrepreneurs on notification alert mechanisms

Pakistan should implement a mechanism to which SMEs can subscribe to receive alerts (e.g. by e-mail or text message) about information updates for markets and goods in which they are interested. The tool should also forewarn traders of WTO notifications about upcoming changes in SPS and TBT measures. This would require a customized local interface with a new global notifications alert system.

The mechanism should enable traders to send their feedback on proposed changes to SPS or TBT measures back to the WTO via the national focal point. Workshops should be organized to train SMEs, business associations and national institutions on how to best use this tool.

Establish an online reporting mechanism and monitoring committee

Small and medium-sized enterprises in Pakistan struggle with market regulations and trade procedures when they export or import goods. Yet there is no simple channel to collect and examine their concerns so the relevant institutions can coordinate actions to overcome these obstacles.

An online platform should be developed to monitor and address difficulties faced by exporters and importers. SMEs should be able to share their concerns and directly question relevant agencies about the challenges they face – for example, when trying to prove conformity with product quality and food safety requirements.

In addition to the online portal, it is necessary to create an institutional mechanism to ensure the continuity of communication between the public and private sector, and improve the business environment. The mechanism could be linked with the national Trade Facilitation Committee to ensure the cooperation of different actors (policymakers and trade and investment support institutions) to address NTM-related trade obstacles and to interact with companies.

Create a regional trade facilitation mechanism

NTM Desk was an initiative to disseminate information on market access conditions in SAARC countries. The programme was suspended and replaced by consultative meetings that gather different stakeholders who take stock of the current regulatory situation in the region. NTM Desk should be reactivated as a hub to identify and resolve issues that affect exporters across SAARC countries.

Develop an effective trade information portal

There is no trade information portal in Pakistan for exporters and importers. Rather, information about trade and markets is fragmented among different websites.

A trade information portal should be created so Pakistani companies can obtain the information they need to enter and compete in the international market. This portal should be designed based on the target audiences – Pakistani traders and the international business community – and should aim to satisfy the needs of both groups. It would be one-stop shop for all trade-related information, including trade statistics, tariffs and non-tariff measures, standards, procedures, contact points, news and events.

Upgrade domestic quality infrastructure and compliance

The NTM survey highlighted a significant absence of testing and certification services in Pakistan. Better export-quality management and infrastructure are vital, given the critical role they play in the success of Pakistani exporters.

Improve the testing and inspection infrastructure

The infrastructure regime encompassing the Pakistan National Accreditation Council, preshipment inspection bodies and laboratories must be improved. In particular:

- Budgetary constraints at public laboratories need to be addressed to improve the efficiency and quality of the services they offer. The strong commitment of the Government to this issue is important.
Staff capacity must be enhanced continuously to ensure that workers are competent in the methods required for quality-related and food safety tests.

Local providers of proficiency tests must be upgraded so they can assess the performance of individual laboratories, as well as specific tests and measurements. Three bodies now offer very limited proficiency testing in Pakistan. Proficiency test providers also need to be accredited to ensure they comply with ISO/IEC 17043.

Technologies must be developed so laboratories can meet new testing requirements and improve their services.

A lab information system should be put in place to manage activities such as inputting, processing and storing data. Most public labs do not use compatible systems. They still generate reports on paper, which involves lengthy verification procedures and time-consuming manual movement of information.

A system to report incidents of noncompliance should be created. No such system exists in Pakistan today. Regulatory bodies should establish a centralized system to report noncompliance, which would serve food safety objectives more holistically.

Sound scientific grounds are needed

Research into sanitary and phytosanitary threats is needed to identify the precise requirements of a particular product. For example, in case of ensuring SPS compliance for MRL limit of pesticide in a particular vegetable, no definite group of pesticide is known to be tested for compliance. Rather, only commonly used pesticides are tested. In many cases, only microbiological or mycotoxin analyses are deemed acceptable, even though the maximum residue limit should be scrutinized.

Better mechanisms to check pesticides are vital

The mechanisms used to examine pesticides and fertilizers should be improved to find those of low quality. These mechanisms should cover pesticides that are imported as well as those sold in provinces.

Harmonize the work of provincial and federal authorities

The activities of provincial and federal authorities should be harmonized to guarantee effective compliance with sanitary and phytosanitary rules. Provincial agriculture departments regulate pesticide registration and usage, and synchronizing their operations with those of DPP is necessary to ensure that fruit and vegetable consignments do not breach maximum residue limits.

Enhance controls at farms

The current approach to plant and animal health conformity is based primarily on testing of finished products. The authorities, including quarantine departments, cannot address health issues at farms. More scrutiny of crops and livestock is needed at Pakistani farms to enhance quality and safety.

Better plant health management is also necessary, starting with pest-risk analysis. Expanding the capacity of DPP and adopting a risk-based approach during inspections for pests would facilitate border control.

Improve the infrastructure of SPS control departments

DPP and PQD lack adequate staff, equipment and training, which can affect the quality of service they provide. These problems lead to delays in service delivery, competence deficiencies and a lack of scientific decision-making. Adequate resources should be provided to DPP and PQD to enhance their human capital and infrastructure.

Harmonize regulations for import, export and local sale

Provincial food authorities work under their respective laws and their food safety domain extends only to their geographical boundaries. At the federal level, PSQCA regulates the quality of around 40 packaged food items, as per its mandate. The food authorities in provinces must remain aware of this mandate.
PSQCA standards usually apply to imported food, but food exports must comply with the rules of importing countries. These overlaps cause havoc – and not only for the business community.

Harmonizing national standards to international ones would simplify compliance requirements and ensure higher quality products for domestic consumption. The Government should introduce guidelines to be followed by the provinces.

Establish a traceability system

Pakistani meat exports have largely been limited to Gulf Cooperation Council countries. Pakistan has been unable to export meat to major markets such as the European Union or the United States because of strict meat traceability requirements. Establishing a proper traceability system in the country is essential to access these markets. Pakistan should initiate a pilot project in a few districts to assess the feasibility of scaling up.

Standardize halal certification

Halal certification laboratories in Pakistan are fragmented. Creating a single halal certification authority would reduce the time and money that Pakistani exporters invest to get the required certificate showing the compliance with Islamic law.

Enhance customs infrastructure and procedures

- Pakistan should try to automate most of its customs procedures (especially export promotion schemes) in light of the provisions of the WTO Trade Facilitation Agreement and the revised Kyoto Convention.

- Providing more storage facilities and proper warehouses at borders and clearance points would improve the customs infrastructure. SMEs should be trained on packaging, using available storage facilities efficiently and guaranteeing that their exports satisfy the relevant requirements.

- A special holding area with cold storage should be set up for perishable items.

- Work should continue on implementation of the national single window. Automation and less paperwork at government offices and customs would reduce the administrative burdens, time and costs.

- Staff shortages at Pakistan Customs must be addressed. There must be enough customs officers to deal efficiently with imports and exports.

- Custom officers dealing with exports should be given proper and relevant training so they can better understand how money is laundered through exports. This will help them develop expertise and enforce the law without compromising trade facilitation.

- Provide modern scanners to reduce the need for manual inspections.

- Offer regular training for traders and clearing agents on customs laws, rules and procedures with the objective of improving compliance.

- Integrate the authorities that issue certificates (such as the Department of Plant Protection, the Animal Quarantine Department and the Marine Fisheries Department) into WeBOC to avoid forgery of documents and minimize the risk of non-compliance.

Build capacity and improve competitiveness

- Build the capacity of enterprises to streamline and expand trade. Pakistani firms must be made aware of trade regulations and procedures. Workshops should include training sessions on topics such as identifying new markets, understanding market-access conditions, marketing strategies, supply chain management and advocacy. Equally important is the need to expand the capacity of government workers to ensure effective and efficient services, eliminate corruption and reduce high staff turnover.
Review the public sector and legal environment to identify better structures and policies to support the development of e-commerce in Pakistan. Create strategies to set up e-commerce-related businesses to offer entrepreneurial opportunities to youth, women and underprivileged communities by building partnerships with local institutions and private sector partners. Offer training and support to entrepreneurs on marketing promotions and developing business through e-commerce.

Improve inter-agency communication and collaboration with the private sector

- Frequent interaction among custom officials, exporters, importers and cargo companies would help improve their relationship and resolve trade-related problems.
- Training and information should be regularly provided to exporters, importers, logistics companies and customs officials about rules, regulations, bilateral and multilateral treaties, International Commercial Terms, transfer of risks and ownership, as well as international trade generally.

Streamline export regulations and procedures

- SBP should review the advance payment requirement for imports. This requirement, designed to regulate outflows of foreign currency, has made it difficult for exporters to import raw materials. The general business community has reacted positively to the SBP decision in 2019 to allow advance payment for imports of raw materials and spare parts, but some companies say its policies on advance payments remain restrictive.
- The Duty and Tax Remission for Exporters initiative requires imported materials to be used within 12 months to avoid duties and taxes. Exporters of fresh fruits and vegetables including kinnows and mangoes use imported corrugated boxes. Given the seasonal nature of these two products, they are often not able to use all the boxes they import. Exporters said the 12-month period should be extended to 24 months so they can use all the boxes they import without having to pay duties.
- The duty drawback process should be improved and made more transparent. Many exporters said they were unclear about the process and that waiting times were long – indeed, some said their refunds were delayed for two years. Allowing trade associations to verify the validity of claims before they are submitted could expedite the processing of claims at local banks and SBP.

Support women entrepreneurs on business and export development

Targeted action to tackle issues that make it difficult for women exporters to succeed would improve the general business environment in Pakistan and remove some of the burdensome regulations that affect all trading companies in the country.

Build the capacity of women in product-specific export marketing

Many businesswomen opt not to export because they do not understand the technical requirements and procedures and are unable to market their products properly. They need proper guidance on making goods that meet international standards, identifying potential markets and buyers, and finding suitable ways to promote their products. Training and mentoring with proper follow-ups should be organized to enable women entrepreneurs to gain the knowledge they need to export successfully.

Improve access to trade finance

Access to finance is a major obstacle for women entrepreneurs. Small loan schemes with low interest rates and limited collateral could benefit small-scale women-led firms. Communication and access to information about existing schemes for women should also be improved. In addition, some women-led enterprises may need additional training to make the best use of the loan schemes and to avoid costly mistakes.

Mainstream gender in trade policy

Pakistan should mainstream gender in trade policy by promoting equitable and inclusive outcomes in export-led strategies. Interaction between the Ministry of Commerce and the Ministry of Women Development
should be improved in an effort to develop a coherent strategy for the socioeconomic development of women through cross-border trade.

Upgrading the capacity of chambers of commerce focusing on women and related business associations would strengthen their efforts to support their members and make it easier for them to inform the relevant authorities of their needs and the constraints they face.

*Encourage businesswomen to formalize trade*

For a variety of reasons, many women entrepreneurs prefer to use informal channels to engage in cross-border trade. Informal trading means that businesswomen cannot use banks to transfer money, which leads them to turn to systems such as *hundi*. Businesswomen must be encouraged to formalize their trade – for instance, through training on customs procedures and by better communicating the benefits. This will not only help enterprises overcome risks associated with informal trade, but it will also help better represent the true contribution of Pakistani women to trade.

*Develop women clusters and a portal to market their goods*

Most enterprises headed by women are small, so developing clusters could help them scale up production to meet demand, consolidate cargo to benefit from better shipping rates, share ideas and support each other. Efforts should also be made to connect women-led SMEs to international buyers through global digital commerce. Training women on using the online marketplace to sell their products effectively is a viable option. Alternatively, a dedicated online portal for Pakistani women-led enterprises could be developed to highlight their offerings and connect them to potential clients.

*Sensitize staff in public agencies and trade support institutions to better support women*

Women entrepreneurs say that staff at various agencies and associations have harassed and treated them unfairly. It is essential to sensitize all staff to gender equality and the fair treatment of women.
APPENDICES

Appendix I Non-tariff measures surveys: global methodology

Non-tariff measure surveys

Since 2010, ITC has completed large-scale company-level surveys on burdensome non-tariff measures and related trade obstacles (NTM surveys hereafter) in over 70 countries on all continents. The main objective of the NTM surveys is to capture how businesses perceive burdensome NTMs and other obstacles to trade at a detailed level – by product and partner country.

All surveys are based on a global methodology consisting of a core part and a country-specific part. The core part of the NTM survey methodology described in this appendix is identical in all survey countries, which enables cross-country analyses and comparison. The country-specific part of the survey allows flexibility in addressing the requirements and needs of each participating country.

The growing role of non-tariff measures in trade

Over several decades, trade liberalization has been used as a development tool based on evidence that benefits accrue to countries actively engaged in world trade. Multilateral, regional and bilateral trade negotiations as well as non-reciprocal concessions have led to a remarkable reduction in global, average tariff protection. With favourable market access conditions, international trade has soared to previously unseen levels, raising overall welfare and standards of living.

The misuse of NTMs may undermine the impact of falling tariffs. The sound use of NTMs to ensure consumer health, protect the environment and safeguard national security is legitimate. However, evidence suggests that countries are resorting to NTMs as alternative mechanisms to protect domestic industries. NTMs have been negotiated within the General Agreement on Tariffs and Trade and at the World Trade Organization (WTO) since the Tokyo Round (1973–1979) and are increasingly dealt with in regional and bilateral trade agreements. Many practitioners consider they have surpassed tariffs in their trade-impeding effect.

NTMs particularly impact exporters and importers in developing and least developed countries (LDCs) that struggle with complex requirements. Firms in these countries often have inadequate domestic trade-related infrastructure and face administrative obstacles. NTMs that would not normally be considered very restrictive can represent major burdens in LDCs. In addition, the lack of export support services and insufficient access to information on NTMs impede the international competitiveness of firms. As a result, both NTMs applied by partner countries as well as domestic burdens have an impact on market access and keep firms from seizing the trade opportunities created by globalization.

An overview of previous research and evaluation

In the literature, different methods have been used to evaluate the effects of NTMs. An early approach employed a concept of incidence with NTM coverage ratios. Such studies rely on extensive databases mapping NTMs per product and applying country. The largest database of official government-reported NTMs used to be the Trade Analysis and Information System published by the United Nations Conference on Trade and Development (UNCTAD), but data has been incomplete and updates irregularly.

In a multi-agency effort, ITC, UNCTAD and the World Bank are collecting data for a global NTM database with a focus on technical barriers to trade and sanitary and phytosanitary standards. The ITC Market Access Map features information on NTMs. However, as complete as the database may be, it reveals little about the impact of NTMs on the business sector nor does it provide information about related POs.

Scope and coverage of the non-tariff measure (NTM) surveys

The objective of the NTM surveys require a representative sample allowing for the extrapolation of the survey result to the country level. To achieve this objective, the NTM survey covers at least 90% of the total export value of each participating country (excluding minerals and arms). The economy is divided into 13 sectors, and all sectors with more than a 2% share in total exports are included in the survey.

The NTM survey sectors are defined as follows:

1. Fresh food and raw agro-based products
2. Processed food and agro-based products
3. Wood, wood products and paper
4. Yarn, fabrics and textiles
5. Chemicals
6. Leather
7. Metal and other basic manufacturing
8. Non-electric machinery
9. Computers, telecommunications and consumer electronics
10. Electronic components
11. Transport equipment
12. Clothing
13. Miscellaneous manufacturing

65The work started in 2006, when the Secretary-General of the United Nations Conference on Trade and Development (UNCTAD) established the Group of Eminent Persons on Non-Tariff Barriers. The main purpose of the group was to discuss the definition, classification, collection and quantification of non-tariff barriers – to identify data requirements, and consequently advance understanding of NTMs and their impact on trade. To carry out the technical work of the group, a Multi-Agency Support Team was set up. Since then, ITC is advancing the work on NTMs in three directions. First, ITC has contributed to the international classification of non-tariff measures (NTM classification) that was finalized in November 2009 and updated in 2012. Second, ITC undertakes NTM surveys in developing countries using the NTM classification. Third, ITC, UNCTAD and the World Bank jointly collect and catalogue official regulations on NTMs applied by importing markets (developed and developing). This provides a complete picture of NTMs as official regulations serve as a baseline for the analysis, and the surveys identify the impact of the measures on enterprises and consequently on international trade.

66Pilot NTM Surveys were carried out in cooperation with UNCTAD in 2008–2009 in Brazil, Chile, India, the Philippines, Thailand, Tunisia and Uganda. The pilot surveys provided a wealth of materials allowing for the significant improvement to both the NTMs classification and the NTM survey methodology. Since then, ITC has implemented NTM surveys based on the new methodology in over 70 countries.
Companies trading arms and minerals are excluded. The export of minerals is generally not subject to trade barriers due to a high demand and the specificities of trade undertaken by large multinational companies. The export of arms is outside of the scope of ITC activities.

The NTM surveys cover companies exporting and importing goods. Companies trading services are excluded, as a survey on NTMs in services would require a different approach and methodology. The NTM survey includes companies specialized in the export-import process and services, such as agents, brokers, and forwarding companies (referred to collectively as ‘trading agents’). These companies can be viewed as service companies because they provide trade logistics services. The answers provided by trading agents are in most cases analysed separately from the answers of the companies that export their own products.

The NTM surveys cover legally registered companies of all sizes and types of ownership. Depending on country size and geography, one to four geographic regions with high concentrations of economic activities (high number of firms) are included in the sample.

Two-step approach

The representatives of the surveyed companies, generally export/import specialists or senior-level managers, are asked to report trade-related problems experienced by their companies in the preceding year that represent a serious impediment for their operations. To identify companies that experience burdensome NTMs, the survey process consists of telephone interviews with all companies in the sample (Step 1) and face-to-face interviews undertaken with the companies that reported difficulties with NTMs during the telephone interviews (Step 2).

Step 1: Telephone interviews

The first step includes short telephone interviews. Interviewers asked respondents to identify the main sector of activity of their companies and the direction of trade (export or import). The respondents are then asked whether their companies have experienced burdensome NTMs. If a company does not report any issues with NTMs, the interview is terminated. Companies that report difficulties with NTMs are invited to participate in an in-depth face-to-face interview.

Step 2: Face-to-face interviews

The second-step interviews are required to obtain all the details of burdensome NTMs and other obstacles at the product and partner country level. These interviews are conducted face-to-face due to the complexity of the issues related to NTMs. Face-to-face interactions with experienced interviewers helps to ensure that respondents from companies correctly understand the purpose and the coverage of the survey, and accurately classify their responses in accordance with predefined categories.

The questionnaire used to structure face-to-face interviews consists of three main parts. The first part covers the characteristics of the companies: number of employees, turnover and share of exports in total sales, whether the company exports its own products or represents a trading agent providing export services to domestic producers.

The second part is dedicated to exporting and importing activities of the company, with all trade products and partner countries recorded. During this process, the interviewer also identifies all products affected by burdensome regulations and countries applying these regulations.

During the third part of the interview, each problem is recorded in detail. A trained interviewer helps respondents identify the relevant government-imposed regulations, affected products, the partner country exporting or importing these products, and the country applying the regulation (partner, transit or home country).

Each burdensome measure (regulation) is classified according to the NTM classification, an international taxonomy of NTMs, consisting of over 200 specific measures grouped into 16 categories (see Appendix II). The NTM classification is the core of the survey, making it possible to apply a uniform and systematic approach to recording and analysing burdensome NTMs in countries with idiosyncratic trade policies and approaches to NTMs.

The face-to-face questionnaire captures the type of burdensome NTMs and the nature of the problem (so-called POs explaining why the measures represent an impediment), the place where each obstacle takes place, and the agencies involved, if any. For example, an importing country can require the fumigation of containers (NTM applied by the partner country), but fumigation facilities are expensive in the exporting country, resulting in a significant increase in export costs for the company (POs located in the home country). The companies can also report generic problems unrelated to any regulation, but affecting their exports or imports, such as corruption and lack of or inadequate export infrastructure. These issues are referred to as problems related to business environment (see Appendix III).

Partnering with a local survey company

A local partner selected through a competitive bidding procedure carries out the telephone interviews and face-to-face interviews. The partner is usually a company specializing in surveys. Generally, the NTM surveys are undertaken in local languages. The telephone interviews are recorded either by a Computer Assisted Telephone Interview system, computer spread sheets or on paper. The face-to-face interviews are initially captured using paper-based interviewer-led questionnaires that are then digitalized by the partner company using a spread sheet-based system developed by ITC.

Gallup Pakistan implemented the survey in Pakistan on behalf and under the guidance of ITC.

Open-ended discussions

During the surveys of companies and preparation of the report, open-ended discussions are held with national experts and stakeholders, for example trade support institutions and sector/export associations. These discussions provide further insights, quality checks and validation of the NTM survey results. The participants review the main findings of the NTM survey and help to explain the reasons for the prevalence of the issues and propose possible solutions.

Confidentiality

The NTM survey is confidential. Confidentiality of the data is paramount to ensure the greatest degree of participation, integrity and confidence in the quality of the data. The paper-based and electronically captured data is transmitted to ITC at the end of the survey.
The number of telephone interviews is mainly driven by the frequency of face-to-face interviews with exporting and importing companies. The number of successfully completed telephone interviews can range from 150 to 1,000, with subsequent 150 to 300 face-to-face interviews. To achieve this objective, a sample size for the telephone interviews with exporting companies is determined independently for each export sector.

For importing companies, the sample size is defined at the country level. A sufficiently large number of enterprises should be interviewed within each export sector to ensure that the share of enterprises experiencing burdensome NTMs is estimated correctly and can be extrapolated to the entire sector. To achieve this objective, a sample size for the telephone interviews with exporting companies is determined independently for each export sector.

The sample size for face-to-face interviews depends on the number of exporting companies per sector and on the assumptions regarding the share of exporting companies that are affected by NTMs in the actual population of this sector. The calculation of a sample size is employed, that is, \( p = 0.5 \). The sample size depends on the number of exporting companies per sector and on the assumptions regarding the share of exporting companies that are affected by NTMs in the actual population of this sector. The calculation of a sample size will be based on the equation below (developed by Cochran, 1963) to yield a representative sample for proportions in large populations (based on the assumption of normal distribution).

\[
n = \frac{t^2 \times p(1-p) \times N}{d^2 + t^2 \times p(1-p)}
\]

Where

- \( n \): Sample size for large populations
- \( t \): t-value for selected margin of error \((d)\). In the case of the NTM Survey 95% confidence interval is accepted, so \( t \)-value is 1.96.
- \( p \): The estimated proportion of an attribute that is present in the population. In the case of the NTM survey, it is a proportion of companies that experience burdensome NTMs. As this proportion is not known prior to the survey, the most conservative estimate leading to a large sample size is employed, that is \( p = 0.5 \).
- \( d \): Acceptable margin of error for the proportion being estimated. In other words, a margin of error that the researcher is willing to accept. In the case of NTM survey \( d = 0.1 \).

each case (e.g. the name of the government regulations and its strictness) can vary, as regulations mandated by different countries are likely to differ. However, if the home country of the interviewed companies applies an NTM to a product exported by a company to several countries, the scenario will be recorded as a single NTM case. When an interviewed company both exports and imports, and reports cases related to both activities, it is included in the analysis twice – once for the analysis of exports and once for the analysis of imports. The distinction is summarized in the Table below.

***Dimensions of an NTM case***

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Country applying</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Home country (where survey is conducted)</td>
</tr>
<tr>
<td>Reporting company</td>
<td>✔</td>
</tr>
<tr>
<td>Affected product (HS 6-digit code or national tariff line)</td>
<td>✔</td>
</tr>
<tr>
<td>Applied NTM (measure-level code from the NTM classification)</td>
<td>✔</td>
</tr>
<tr>
<td>Trade flow (export or import)</td>
<td>✔</td>
</tr>
<tr>
<td>Partner country applying the measure</td>
<td>✔</td>
</tr>
</tbody>
</table>

Cases of POs and problems with the business environment are counted in the same way as NTM cases. The statistics are provided separately from NTMs, even though in certain instances they are closely related. For example, delays can be caused by the preshipment inspection requirements. As many of the POs and problems with the business environment are not product specific, the statistics are constructed along two dimensions: type of obstacles and country where they occur, as well as agencies involved.

**Enhancing local capacities**

The NTM surveys enhance national capacities by transmitting skills and knowledge to a local partner company. ITC does not implement the NTM surveys, but guides and supports the local survey company and experts.

Before the start of the NTM survey, the local partner company, including project managers and interviewers are fully trained on the different aspects of the NTMs, the international NTM classification and the ITC NTM Survey methodology. ITC representatives stay in the country for the launch of the survey and initial interviews, and remain in contact with the local partner during the entire duration of the survey, usually around six months, to ensure a high quality of survey implementation. ITC experts closely follow the work of the partner company and provide regular feedback on the quality of the captured data (including classification of NTMs) and the general development of the survey, which helps the local partner to overcome any possible problems.

ITC also helps to construct a business register (list of exporting and importing companies with contact details), which remains at the disposal of the survey company and national stakeholders. The business register is a critical part of any company-level survey, but unfortunately it is often unavailable, even in the advanced developing countries.

ITC invests much time, effort and resources into constructing a national business register of exporting and importing companies. The initial information is obtained with the help of national authorities and other stakeholders (for example, sectoral associations). In cases where it is not available from government sources or a sectoral association, ITC purchases information from third companies, and in certain cases digitalizes it from paper sources. The information from various sources is then processed and merged into a comprehensive list of exporting and importing companies.

Upon completion of the NTM Survey, the local partner company is fully capable of independently implementing a follow-up survey or other company-level surveys as it is equipped with the business register and trained on the survey methodology as well as trade and NTM-related issues.

**Caveats**

The utmost effort is made to ensure the representativeness and the high quality of the NTM Survey results, yet several caveats must be kept in mind.

First, the NTM Surveys generate perception data, as the respondents are asked to report burdensome regulations representing a serious impediment to their exports or imports. The respondents may have different scales for judging what constitutes an impediment. The differences may further intensify when the results of the surveys are compared across countries, stemming from cultural, political, social, economic and linguistic differences. Some inconsistency may be possible among interviewers. For example, these are related to matching reported measures against the codes of the NTM classification due to the complex and idiosyncratic nature of NTMs.

Second, in many countries a systematic business register covering all sectors is not available or incomplete. As a result, it may be difficult to ensure random sampling within each sector and a sufficient rate of participation in smaller sectors. Whenever this is the case, the NTM survey limitations are explicitly provided in the corresponding report.

Finally, certain NTM issues are not likely to be known by the exporting and importing companies. For example, exporters may not know the demand-side constraints behind the borders. An example is ‘buy domestic’ campaigns. The scope of the NTM survey is limited to legally operating companies and does not include unrecorded trade, for example shuttle traders.

**Following up on the ITC Non-Tariff Measure Survey**

The findings of each ITC NTM Survey are presented and discussed at a stakeholder workshop. The workshop brings together government officials, experts, companies, donors, non-governmental organizations (NGOs) and academics. It fosters a dialogue on NTM issues and helps identify possible solutions to the problems experienced by exporting and importing companies.

The NTM survey results serve as a diagnostic tool for identifying and solving predominant problems. These problems can be addressed at the national or international level. The NTM survey findings can also serve as a basis for designing projects to address the challenges identified and for supporting fundraising activities.
Appendix II  Non-tariff measures classification

Importing countries are very idiosyncratic in the ways they apply non-tariff measures (NTMs). This called for an international taxonomy of NTMs, which was prepared by the Multi-Agency Support Team, a group of technical experts from eight international organizations, including the Food and Agricultural Organization of the United Nations, the International Monetary Fund, ITC, the Organisation for Economic Co-operation and Development, the United Nations Conference on Trade and Development, the United Nations Industrial Development Organization, the World Bank and WTO. It is used to collect, classify, analyse and disseminate information on NTMs received from official sources such as government regulations.

For the purpose of the large-scale company surveys on NTMs, ITC uses a simplified version of this international classification.

The NTM classification for surveys differentiates measures according to 16 chapters (denoted by alphabetical letters, see below), each comprising sub-chapters (denoted by two letters) and the individual measures (denoted by two letters and a number). The following sketches the content of each of the 16 chapters.

**Chapter A – Technical Regulations**
Product-related requirements that are legally binding and set by the importing country. They define the product characteristics, technical specifications of a product or the production process and post-production treatment and comprise the applicable administrative provisions, with which compliance is mandatory. Technical requirements include sanitary and phytosanitary measures, which are generally implemented to protect human, animal and plant life, and health.

**Chapter B – Conformity Assessment**
Measures determining whether a product or a process complies with the technical requirements specified under Chapter A. It includes control, inspection and approval procedures – such as testing, inspection, certification and traceability – which confirm and control that a product fulfills the technical requirements and mandatory standards imposed by the importing country, for example to safeguard the health and safety of consumers.

**Chapter C – Preshipment Inspection and Other Formalities**
Practice of checking, consigning, monitoring and controlling the shipment of goods before or at entry into the destination country.

**Chapter D – Charges, Taxes and Other Para-tariff Measures**
Measures other than tariffs that increase the cost of imports in a similar manner, i.e. by a fixed percentage or by a fixed amount. They are also known as para-tariff measures. Customs surcharges and general sales taxes are examples.

**Chapter E – Licences, Quotas, Prohibitions and Other Quantity Control Measures**
Measures that restrain the quantity of goods that can be imported, regardless of whether they come from different sources or from one specific supplier. These measures can take the form of restrictive licensing, fixing of a predetermined quota or through prohibitions.

**Chapter F – Finance Measures**
Measures that are intended to regulate the access to and cost of foreign exchange for imports and define the terms of payment. They may increase import costs in the same manner as tariff measures.

**Chapter G – Price-Control Measures**
Measures implemented to control the prices of imported articles in order to: support the domestic price of certain products when the import price of these goods is lower; establish the domestic price of certain products because of price fluctuation in domestic markets, or price instability in a foreign market; and counteract the damage resulting from the occurrence of ‘unfair’ foreign trade practices.

**Chapter H – Anti-Competitive Measures**
Measures intended to grant exclusive or special preferences or privileges to one or more limited groups of economic operators.

**Chapter I – Trade-Related Investment Measures**
Measures that restrict investment by requesting local content, or requesting that investment be related to export to balance imports.

**Chapter J – Distribution Restrictions**
Restrictive measures related to the internal distribution of imported products.

**Chapter K – Restrictions on Post-Sales Services**
Measures restricting the provision of post-sales services in the importing country by producers of exported goods.

**Chapter L – Subsidies**
Measures related to financial contributions by a government or government body to a production structure, be it a particular industry or company, such as direct or potential transfer of funds (e.g. grants, loans, equity infusions), payments to a funding mechanism and income or price support.

**Chapter M – Government Procurement Restrictions**
Measures controlling the purchase of goods by government agencies, generally by preferring national providers.

**Chapter N – Intellectual Property**
Measures related to intellectual property rights in trade. Intellectual property legislation covers patents, trademarks, industrial designs, layout designs of integrated circuits, copyright, geographical indications and trade secrets.

**Chapter O – Rules of Origin**
Covers laws, regulations and administrative determinations of general application applied by the governments of importing countries to determine the country of origin of goods.

**Chapter P – Export-related Measures**
Encompasses all measures that countries apply to their exports. It includes export taxes, export quotas or export prohibitions, among others.
The structure of the NTM classification for ITC surveys

<table>
<thead>
<tr>
<th>Non-tariff measures classification for surveys</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A to O. Import related measures</strong></td>
</tr>
<tr>
<td>Measures imposed by the country importing the goods. From the perspective of an exporter, these are the measures applied by the destination country of your product. From the perspective of an importer, these are the measures applied by your own country on the goods that you import.</td>
</tr>
<tr>
<td>A. Technical requirements</td>
</tr>
<tr>
<td>B. Conformity assessment</td>
</tr>
<tr>
<td>C. Pre-shipment inspection and other entry formalities</td>
</tr>
<tr>
<td>D. Trade remedies (antidumping, countervailing and safeguards)</td>
</tr>
<tr>
<td>E. Quantity control measures (e.g. licences, quotas, prohibitions)</td>
</tr>
<tr>
<td>F. Charges, taxes and price control measures</td>
</tr>
<tr>
<td>G. Finance measures</td>
</tr>
<tr>
<td>H. Anti-competitive measures</td>
</tr>
<tr>
<td>I. Trade-related investment measures</td>
</tr>
<tr>
<td>J. Distribution restrictions</td>
</tr>
<tr>
<td>K. Restriction on post-sales services</td>
</tr>
<tr>
<td>L. Subsidies</td>
</tr>
<tr>
<td>M. Government procurement restrictions</td>
</tr>
<tr>
<td>N. Intellectual property</td>
</tr>
<tr>
<td>O. Rules of origin and related certificate of origin</td>
</tr>
</tbody>
</table>

| **P. Export related measures**                |
| Measures imposed by the country exporting the goods. From the perspective of an exporter, these are the measures imposed by your own country on the goods you export from your country. From the perspective of an importer, these measures are imposed by the country of origin on the goods you import from this country. |
| **P.O. List of procedural obstacles**         |
| This list provides a categorization of the problems related to NTMs that exporters and importers experience. |

February 2015

*Source: International Trade Centre, NTM classification adapted for ITC surveys, 2015 (unpublished document).*
Appendix III  Procedural obstacles

Following is a list of POs related to compliance with non-tariff measures and to an inefficient trade-related business environment and infrastructure.

**Administrative burdens related to regulations**
- A1. Large number of different documents
- A2. Documentation is difficult to fill out
- A3. Difficulties with translation of documents from or into other languages
- A4. Numerous administrative windows/organizations involved, redundant documents

**Information or transparency issues**
- B1. Information on selected regulation is not adequately published and disseminated
- B2. No due notice for changes in selected regulation and related procedures
- B3. Selected regulation changes frequently
- B4. Requirements and processes differ from information published

**Discriminating behaviour of officials**
- C1. Arbitrary behaviour of officials regarding classification and valuation of the reported product
- C2. Arbitrary behaviour of officials with regards to the reported regulation

**Time constraints**
- D1. Delay related to reported regulation
- D2. Deadlines set for completion of requirements are too short

**Informal or unusually high payments**
- E1. Unusually high fees and charges for reported certificate/regulation
- E2. Informal payment, e.g. bribes for reported certificate/regulation

**Lack of sector-specific facilities**
- F1. Limited/inappropriate facilities for testing
- F2. Limited/inappropriate facilities for sector-specific transport and storage, e.g. cold storage, refrigerated trucks
- F3. Other limited/inappropriate facilities, related to reported certificate/regulation

**Lack of recognition or accreditations**
- G1. Facilities lacking international accreditation/ recognition
- G2. Other problems with international recognition, e.g. lack of recognition of national certificates

**Other procedural obstacles**
- H1. Other procedural obstacles
Appendix IV  Project timeline and stakeholder consultation

Timeline of NTM Business Survey implementation in Pakistan

March – June 2019
Survey implementation:
1200 companies interviewed

17 July 2019
National Stakeholder meeting in Islamabad. Public sector inputs.

June 2020
Publication of the country report

Agenda of National Stakeholder Meeting in Pakistan
17 July 2019 - Islamabad, Pakistan

08:30  Registration
09:00  Opening remarks
• Mr Muhammad Ashraf, Director General (Trade Policy), Ministry of Commerce
• Mr Gonzalo Varela, Senior Economist, World Bank
• Mr. Mondher Mimouni, Chief (TMI), International Trade Centre

Session 1 - Background and overview of results
The ITC will outline the survey implementation and key findings. It will present the companies’ perceptions of NTMs and the challenges they represent to trade.

09:15  Overview on ITC Project on Non-Tariff Measures (NTMs) and implementation of survey in Pakistan
• Mr. Mondher Mimouni, Chief (TMI), International Trade Centre

09:30  Results of the survey: companies’ perception on NTMs
• Mr. Samidh Shrestha, Analyst, International Trade Centre

10:30  Questions & answers

Session 2 - Thematic round tables
Participants will be invited to share their views and experiences on NTM-related barriers and policy options to address them in the three selected themes. Each focus group will establish a roadmap with priority actions to overcome the identified obstacles

11:15  Parallel roundtable sessions:
• Round table 1: Technical requirements, standards and conformity assessment.
• Round table 2: Rules of origin, customs procedures and other border clearance issues

13:00  Concluding Remarks and Closing
• ITC, Ministry of Commerce, World Bank
### Appendix V  Laboratories in Pakistan for food testing

**Chemical testing laboratories for fruits and vegetables**

<table>
<thead>
<tr>
<th>Laboratories</th>
<th>Pesticide residues</th>
<th>Microbiological analysis</th>
<th>Heavy metals</th>
<th>Protein</th>
<th>Fat</th>
<th>Fiber</th>
<th>Moisture</th>
<th>Carbohydrates</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCSIR Labs., Karachi</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Qarshi Research Int. Labs. Pvt. Ltd. Hattar</td>
<td>-</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>SGS Pakistan, Karachi</td>
<td>-</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>PCSIR Labs. Complex, Peshawar</td>
<td>-</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>PCSIR Labs. Complex, Lahore</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Industrial Analytical Center, ICCBS, Karachi</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Intertek Pakistan, Karachi</td>
<td>-</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Grain Quality Testing Lab., FSRI, PARC, Islamabad</td>
<td>-</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Global Environmental Lab Pvt. Ltd. Karachi</td>
<td>-</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Nuclear Institute for Agriculture and Biology (NIAB), Faisalabad</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Grain Quality Testing Lab., PARC, Karachi</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>National Institute for Biotechnology &amp; Genetic Eng. (NIBGE), Faisalabad</td>
<td>-</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
</tbody>
</table>
### Physical testing laboratories for rice (1/2)

<table>
<thead>
<tr>
<th>Laboratories</th>
<th>Rice Classification</th>
<th>Milling Degree</th>
<th>Other Quality Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Kernel Length mm</td>
<td>A combination of the length/width ratio</td>
<td>Under-Well, Extra-Well-milled</td>
</tr>
<tr>
<td>PCSIR, Karachi</td>
<td>• • • •</td>
<td>•</td>
<td>• • • • • • •</td>
</tr>
<tr>
<td>Qarshi Research Int. Labs.</td>
<td>- - - -</td>
<td>-</td>
<td>- - - - - - -</td>
</tr>
<tr>
<td>SGS Pakistan, Karachi</td>
<td>• • • •</td>
<td>•</td>
<td>• • • • • • •</td>
</tr>
<tr>
<td>PCSIR, Peshawar</td>
<td>• • • •</td>
<td>•</td>
<td>• • • • • • •</td>
</tr>
<tr>
<td>PCSIR, Lahore</td>
<td>• • • •</td>
<td>•</td>
<td>• • • • • • •</td>
</tr>
<tr>
<td>Industrial Analytical Center, ICCBS, Karachi</td>
<td>• • • •</td>
<td>•</td>
<td>• • • • • • •</td>
</tr>
<tr>
<td>Intertek Pakistan, Karachi</td>
<td>• • • •</td>
<td>•</td>
<td>• • • • • • •</td>
</tr>
<tr>
<td>Grain Quality Testing Lab., Islamabad</td>
<td>• • • •</td>
<td>•</td>
<td>• • • • • • •</td>
</tr>
<tr>
<td>Global Environmental Lab Pvt. Ltd. Karachi</td>
<td>- - - -</td>
<td>-</td>
<td>- - - - - - -</td>
</tr>
<tr>
<td>Nuclear Institute for Agriculture and Biology (NIAB), Faisalabad</td>
<td>- - - -</td>
<td>-</td>
<td>- - - - - - -</td>
</tr>
<tr>
<td>Rice Research Institute</td>
<td>• • • •</td>
<td>•</td>
<td>• • • • • • •</td>
</tr>
<tr>
<td>Bureau Veritas Pakistan Pvt. Ltd., Karachi</td>
<td>• • • •</td>
<td>•</td>
<td>• • • • • • •</td>
</tr>
<tr>
<td>Grain Quality Testing Lab., Karachi</td>
<td>• • • •</td>
<td>•</td>
<td>• • • • • • •</td>
</tr>
<tr>
<td>National Institute for Biotechnology &amp; Genetic Eng. (NIBGE), Faisalabad</td>
<td>- - - -</td>
<td>-</td>
<td>- - - - - - -</td>
</tr>
<tr>
<td>Rice Lab Pakistan Pvt. Ltd., Karachi</td>
<td>• • • •</td>
<td>•</td>
<td>• • • • • • •</td>
</tr>
<tr>
<td>Inspectorate Pakistan Pvt. Ltd., Karachi &amp; Lahore (Cotecna Inspection)</td>
<td>• • • •</td>
<td>•</td>
<td>• • • • • • •</td>
</tr>
<tr>
<td>Romer Lab, Rawalpindi</td>
<td>- - - -</td>
<td>-</td>
<td>- - - - - - -</td>
</tr>
<tr>
<td>Baltic Control Pakistan (Pvt.) Ltd., Karachi</td>
<td>• • • •</td>
<td>•</td>
<td>• • • • • • •</td>
</tr>
<tr>
<td>Trading Corp. of Pakistan (TCP)</td>
<td>• • • •</td>
<td>•</td>
<td>• • • • • • •</td>
</tr>
</tbody>
</table>
Physical testing laboratories for rice (2/2)

<table>
<thead>
<tr>
<th>Laboratories</th>
<th>Damaged Kernel %</th>
<th>Heat Damaged Kernels %</th>
<th>Chalky Kernels %</th>
<th>Immature Kernels %</th>
<th>Red Kernels %</th>
<th>Red Streaked Kernels %</th>
<th>Foreign Matter</th>
<th>%Grains %</th>
<th>Specific Defects of Parboiled Rice</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCSIR, Karachi</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td></td>
</tr>
<tr>
<td>Qarshi Research Int. Labs.</td>
<td>- - - - - - - - - - - - - -</td>
<td>- - - - - - - - - - - - - -</td>
<td>- - - - - - - - - - - - - -</td>
<td>- - - - - - - - - - - - - -</td>
<td>- - - - - - - - - - - - - -</td>
<td>- - - - - - - - - - - - - -</td>
<td>- - - - - - - - - - - - - -</td>
<td>- - - - - - - - - - - - - -</td>
<td></td>
</tr>
<tr>
<td>SGS Pakistan, Karachi</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td></td>
</tr>
<tr>
<td>PCSIR, Peshawar</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td></td>
</tr>
<tr>
<td>PCSIR, Lahore</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td></td>
</tr>
<tr>
<td>Industrial Analytical Center, ICCBS, Karachi</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td></td>
</tr>
<tr>
<td>Intertek Pakistan, Karachi</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td></td>
</tr>
<tr>
<td>Grain Quality Testing Lab., Islamabad</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td></td>
</tr>
<tr>
<td>Global Environmental Lab Pvt. Ltd. Karachi</td>
<td>- - - - - - - - - - - - - -</td>
<td>- - - - - - - - - - - - - -</td>
<td>- - - - - - - - - - - - - -</td>
<td>- - - - - - - - - - - - - -</td>
<td>- - - - - - - - - - - - - -</td>
<td>- - - - - - - - - - - - - -</td>
<td>- - - - - - - - - - - - - -</td>
<td>- - - - - - - - - - - - - -</td>
<td></td>
</tr>
<tr>
<td>Nuclear Institute for Agriculture and Biology (NIAB), Faisalabad</td>
<td>- - - - - - - - - - - - - -</td>
<td>- - - - - - - - - - - - - -</td>
<td>- - - - - - - - - - - - - -</td>
<td>- - - - - - - - - - - - - -</td>
<td>- - - - - - - - - - - - - -</td>
<td>- - - - - - - - - - - - - -</td>
<td>- - - - - - - - - - - - - -</td>
<td>- - - - - - - - - - - - - -</td>
<td></td>
</tr>
<tr>
<td>Rice Research Institute</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td></td>
</tr>
<tr>
<td>Bureau Veritas Pakistan Pvt. Ltd., Karachi</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td></td>
</tr>
<tr>
<td>Grain Quality Testing Lab., Karachi</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td></td>
</tr>
<tr>
<td>National Institute for Biotechnology &amp; Genetic Eng. (NIBGE), Faisalabad</td>
<td>- - - - - - - - - - - - - -</td>
<td>- - - - - - - - - - - - - -</td>
<td>- - - - - - - - - - - - - -</td>
<td>- - - - - - - - - - - - - -</td>
<td>- - - - - - - - - - - - - -</td>
<td>- - - - - - - - - - - - - -</td>
<td>- - - - - - - - - - - - - -</td>
<td>- - - - - - - - - - - - - -</td>
<td></td>
</tr>
<tr>
<td>Rice Lab Pakistan Pvt. Ltd., Karachi</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td></td>
</tr>
<tr>
<td>Inspectorate Pakistan Pvt. Ltd., Karachi &amp; Lahore (Cotecna Inspection)</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td></td>
</tr>
<tr>
<td>Romer Lab, Rawalpindi</td>
<td>- - - - - - - - - - - - - -</td>
<td>- - - - - - - - - - - - - -</td>
<td>- - - - - - - - - - - - - -</td>
<td>- - - - - - - - - - - - - -</td>
<td>- - - - - - - - - - - - - -</td>
<td>- - - - - - - - - - - - - -</td>
<td>- - - - - - - - - - - - - -</td>
<td>- - - - - - - - - - - - - -</td>
<td></td>
</tr>
<tr>
<td>Baltic Control Pakistan (Pvt.) Ltd., Karachi</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td></td>
</tr>
<tr>
<td>Trading Corp. of Pakistan (TCP)</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td>● ● ● ● ● ● ● ● ● ● ● ● ● ●</td>
<td></td>
</tr>
</tbody>
</table>
### Chemical testing laboratories for rice

<table>
<thead>
<tr>
<th>Laboratories</th>
<th>GMO testing</th>
<th>Total Aflatoxin (B1+B2+G1+G2)</th>
<th>Pesticide residues</th>
<th>Microbiological analysis</th>
<th>Other Variety through DNA</th>
<th>Amylose content</th>
<th>Protein</th>
<th>Fat</th>
<th>Fiber</th>
<th>Moisture</th>
<th>Alkali spreading value</th>
<th>Gel consistency</th>
<th>Germination testing</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCSIR, Karachi</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Qarshi Research Int. Labs. Hattar</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SGS Pakistan, Karachi</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PCSIR, Peshawar</td>
<td>-</td>
<td>●</td>
<td>●</td>
<td>-</td>
<td>-</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PCSIR, Lahore</td>
<td>-</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industrial Analytical Center, IKarachi</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intertek Pakistan, Karachi</td>
<td>-</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food Science Research Institute, Islamabad</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nuclear Institute for Agriculture and Biology, Faisalabad</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rice Research Institute, Kala Shah Kaku</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td></td>
<td>●</td>
</tr>
<tr>
<td>Bureau Veritas Pakistan, Karachi</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>Grain Quality Testing Lab., Karachi</td>
<td>-</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td></td>
<td></td>
</tr>
<tr>
<td>National Institute for Bio-technology &amp; Genetic Engineering (NIBGE), Faisalabad</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Global Environmental Lab, Karachi</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inspectorate Pakistan Pvt. Ltd., Karachi</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>Romer Lab, Rawalpindi</td>
<td>-</td>
<td>●</td>
<td>●</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>Baltic Control Pakistan, Karachi</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>Trading Corporation of Pakistan (TCP)</td>
<td>NA</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>Rice Lab Pakistan Ltd. Karachi</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td>-</td>
</tr>
</tbody>
</table>
### Chemical testing laboratories for meat

<table>
<thead>
<tr>
<th>Laboratories</th>
<th>Microbiological Analysis</th>
<th>Heavy Metals</th>
<th>Protein</th>
<th>Fat</th>
<th>Fiber</th>
<th>Moisture</th>
<th>Carbohydrates</th>
<th>Antibiotic Residues</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCSIR Labs. Complex, Karachi*</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Qarshi Research Int. Labs. Pvt. Ltd. Hattar</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>SGS Pakistan, Karachi</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>PCSIR Labs. Complex, Peshawar</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>PCSIR Labs. Complex, Lahore</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Industrial Analytical Center, ICCBS, Karachi</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Intertek Pakistan, Karachi</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Grain Quality Testing Lab., FSRI, PARC, Islamabad*</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Global Environmental Lab Pvt. Ltd. Karachi</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Nuclear Institute for Agriculture and Biology (NIAB), Faisalabad</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Grain Quality Testing Lab., PARC, Karachi</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>-</td>
</tr>
<tr>
<td>National Institute for Biotechnology &amp; Genetic Eng. (NIBGE), Faisalabad</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>-</td>
</tr>
</tbody>
</table>
REFERENCES


UNECE (2019), National Trade and Transport Facilitation Committee as an Effective Mechanism for Implementing Trade Facilitation Measures in Pakistan.


World Bank (2019). Enterprise Surveys. Available at: https://www.enterprisesurveys.org


Pakistan: Invisible barriers to trade

ITC SERIES ON NON-TARIFF MEASURES

Available reports

- Making regional integration work – Company perspectives on non-tariff measures in Arab States (2015)
- How businesses experience non-tariff measures: Survey-based evidence from developing countries (2015)
- Non-Tariff Measures and the fight against malaria: Obstacles to trade in anti-malaria commodities (2011)

Country reports

Available Country Reports


Forthcoming

Oman
Seychelles
Sudan
Viet Nam

The reports are accessible free of charge online
www.intracen.org/ntm/publications

NTM survey results are available online
www.ntmsurvey.org