

ASSESSING COST-EFFECTIVENESS OF NON-TARIFF MEASURES

The case of the "grains" value chain in Barbados



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Assessing cost-effectiveness of non-tariff measures: : The case of the "grains" value chain in Barbados

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ABBREVIATIONS AND ACRONYMS

CARICOM	Caribbean Community	
GDP	Gross Domestic Product	
NTM Non-tariff Measures		
UNCTAD	United Nations Conference on Trade and Development	
SDG Sustainable Development Goals		
SPS	Sanitary and Phytosanitary Measures	
твт	Technical Barriers to Trade	

1. INTRODUCTION

Barbados, as with many other countries in the Caribbean region and small islands developing states (SIDS), continues to grapple with the 'triple crises' of the COVID 19 pandemic, the war in Ukraine and the destabilizing impacts of climate change. Together, these challenges have resulted in high rates of inflation and, in particular, escalating food prices. This has been further compounded by the disruptions in supply chains which led to higher shipping costs. Non-tariff measures (NTMs), which often take the form of Sanitary and Phytosanitary measures (SPS) or Technical Barriers to Trade (TBT), can have the unintended consequence of adding additional burden and cost for compliance to the private sector, which can be passed onto consumers. NTMs have a significant impact on international trade, influencing who trades what and how much. They have been described as being almost twice as trade restrictive as tariffs (WTO, 2012). Understanding the implications of NTMs is essential to formulate effective development strategies that achieve Sustainable Development Goals. This is why UNCTAD has been at the forefront of identifying and classifying NTMs.

UNCTAD's (2020) Toolkit Assessing Cost-Effectiveness of Non-tariff Measures was designed to conduct country-specific reviews of NTMs applicable to important imported intermediate products to a national value chain of interest. "It aims to encourage good regulatory practices and support the design and implementation of quality regulations that achieve public policy objectives at as-low-as-possible compliance costs. It is designed to provide governments and policymakers a framework in the form of a step-by-step deployment guide, including the tools needed for such an evaluation" (UNCTAD, 2020). This study aims to identify and analyse NTMs applicable to imported grains that are also used as intermediate products in the poultry and bakery value chains in Barbados, with the goal of identifying potential areas for improvement in the design, implementation, and compliance processes of NTMs. It is a pilot study for one particular sector and country, which can be similarly conducted in other sectors in the Organisation of Eastern Caribbean States (OECS) region and the CARICOM region. It can also be conducted for NTMs related to imports to boost the competitiveness of a particular sector with the overall benefit of facilitation increases in exports regionally and internationally.

2. METHODOLOGY

UNCTAD's NTM programme aims to promote transparency and good regulation related to NTMs that affect trade. To achieve this, UNCTAD has been leading international efforts to collect data on NTMs and has developed – together with other international organizations – the International Classification of Non-Tariff Measures to enable data collection, analysis, and transparency regarding NTMs. The NTM data collected by UNCTAD is gathered in the Trade Analysis and Information System (TRAINS) database, which is the most complete collection of publicly available information on NTMs, covering over 100 countries and 90 per cent of world trade. UNCTAD's transparency initiative provides the basis of the Barbados NTM data and survey, with the data collected through a consistent and comparable data collection approach. UNCTAD disseminates the NTM data through various channels, including the TRAINS dissemination portal, which is updated in real-time and provides seamless and up-to-date information to policymakers, government analysts, importers, exporters, and researchers. The portal allows users to compare regulatory requirements across markets, access large data sets for statistical analyses, and customize searches based on various criteria.

This study utilised the UNCTAD cost-effectiveness non-tariff measures toolkit to conduct an analysis of the impact of NTMs on the imported "grains" – wheat, soya bean and maize – in Barbados. Following the step-by-step approach of the toolkit, and as shown in Figure 1, this case study covers:

- Step 1 Product Selection and NTM Mapping
- Step 2 Stakeholder Identification
- Step 3 and 4 Stakeholder Engagement and Input Analysis: Key Findings
- Step 5 Policy Options

The products of interest were selected in collaboration with the Barbadian Ministry of Agriculture and Food Security. The criteria used to select the "grains" of wheat, soya bean, and maize were based on their share of imports and their importance for food security and the domestic economy in Barbados. Specifically, wheat is a staple product used in the production of bread, pastries, and other baked goods, and accounts for a significant portion of Barbados' food imports. Soybeans are also an important source of protein and are used in the production of animal feed, soybean oil, and other food products. Maize, on the other hand, is a key input in the production of poultry and livestock feed, as well as cornmeal, which is a popular ingredient in Barbadian cuisine. This was followed by a process of in-depth engagement with key public and private stakeholders to gather their inputs and insights. Key stakeholders in the selected sector have been interviewed and their answers analysed (see Annex 4). Based on the findings, key policy proposals were identified for improvements along the 'design', 'implementation' and 'compliance' processes for the NTMs.

To ensure the validity of the findings and to develop an action plan for the implementation of the recommended policy proposals, a workshop was held on 16 March 2023 in Bridgetown. This approach aims to chart a way forward with regulatory and procedural improvements in the business environment for the private sector, ultimately lessening the impact on consumers. Through this methodology, this study aims to contribute to the improvement of Barbados' regulatory practices and the promotion of a more business-friendly environment for the private sector while achieving public policy objectives at as-low-as-possible compliance costs.

Figure 1: Steps in NTM cost effectiveness assessment



Source: UNCTAD's NTM Cost Effectiveness Tool Kit (2020).

3. VALUE CHAIN / PRODUCT SELECTION

3.1 IMPORT DATA

Barbados' import data reveals that total merchandise imports for the year 2021 were approximately US\$1,673 billion,¹ with 'grains – wheat, maize & soya beans' accounting for roughly US\$27 million. Imports of "grains" as a percentage of total merchandise imports is approximately 1.5 per cent. Barbados is a major exporter of services, mainly tourism. Its total goods exports were US\$ 350 million in 2021. According to provisional statistics for 2022 (Table 1) total merchandise and grains imports increase by 28 per cent and 37 per cent, respectively. This has to be put in perspective with the increase of only 9 per cent in the quantity of "grains" imported. This difference can be explained by the significant rise in food prices in 2022, with the FAO food price index averaging 143.7, the highest level ever recorded, compared to 125.7 in 2021 and 98.1 in 2020.²

¹ UN ComTrade database.

² <u>https://www.fao.org/worldfoodsituation/foodpricesindex/en/</u>

Table 1: Barbados imports in 2021-2022						
Product	Quantity	(tonnes)	Percentage change 2021-2022	Imports (rr	iillion US\$)	Percentage change 2021-2022
	2021	2022		2021	2022	
Wheat	12 185	17 320	42	4.274	8.992	110
Maize	28 536	28 009	-2	9.114	11.122	22
Soya beans	23 251	24 250	4	13.509	16.674	23
Total "grains"	76 157	86 897	14	26.898	36.790	37
Total imports		n.a.		1 673	2 147	28

Source: own calculations based on UN Comtrade.

The United States is the primary source for "grains" imports into Barbados accounting for approximately 99 per cent of the total imports of the product. This is followed by the United Kingdom and Canada as import sources of 'grains' into Barbados.³ In terms of volume, total import of wheat was 12,185 tonnes, maize 28,536 tonnes and soya beans- 23,251 tonnes in 2021, representing a total of 76,157 tonnes. These figures highlight the significance of "grains" as an essential component of Barbados' food supply chain and the country's reliance on imports to meet its domestic needs. In 2011, FAO estimated that Barbados imported over 87 per cent of the food it consumes.⁴

3.2 DOMESTIC RELEVANCE

The destabilizing impacts of the COVID-19 pandemic and the ongoing war in Ukraine has further highlighted the country's vulnerabilities, particularly those related to food security. This, coupled with high transportation costs because of the disruptions in supply chain has resulted in high inflation rates, which reached 9.1 per cent in December 2022⁵ with food prices increasing by 19.5 per cent during the same period.⁶

Despite agriculture being seen as a driver toward achieving food security and economic growth, it currently only contributes to approximately 1.6 per cent of the gross domestic product (GDP) of Barbados and employs 10 per cent of the population.⁷ The main agricultural products include sugar, cotton, and vegetables.⁸ However, for poultry and in particular chicken production, Barbados produced 9.88 million kilograms (kg) of chicken in 2022. Additionally, imports of frozen or fresh chicken for the same period were 0.76 million kg.⁹

In this context, the development of the domestic poultry sub-sector can contribute to Barbados' objective of achieving food security, as poultry meat provides a source of protein for consumption by the local population. However, there is a high dependence on imports of inputs into production for consumption in the poultry value chain (e.g. animal feeds).¹⁰ High cost of inputs has therefore been described as one of

³ See Table 1.

⁴ <u>https://sustainabledevelopment.un.org/content/documents/19516Session%201%20Ms.%20Semedo%20</u> <u>Presentation%20%20FAO.pdf.</u>

⁵ See https://stats.gov.bb/subjects/economic-statistics/retail-price-index/inflation-tables-point-to-point-percentagechange-in-the-all-items-index/.

⁶ <u>See https://tradingeconomics.com/barbados/inflation-rate</u>.

⁷ https://www.cardi.org/wp-content/uploads/downloads/2018/05/CARDI-Strategic-Plan-2018-to-2022-Final.pdf

⁸ See <u>https://www.cardi.org/country-offices/barbados/</u>.

⁹ Data from the Ministry of Agriculture, Food & Nutritional Security.

¹⁰ See <u>https://www.fao.org/3/a1250e/annexes/CountryReports/Barbados.pdf</u>.

the major challenges affecting the production of animal products in Barbados (FAO, 2005).¹¹ For instance, Pinnacle Feeds, Barbados' only animal and poultry feed supplier, raised the prices of animal and poultry feeds by US\$ 25 per metric tonnes in response to world price increases in maize and soya beans.¹²

To alleviate the burden on households, the Government has implemented zero rate of VAT on a key basket of basic goods purchased by households which includes bread, flour and some meat products. The Department of Commerce and Consumer Affairs (DCCA) has responsibility for monitoring retail prices of items in the basket of basic consumer items.

3.3 REGIONAL CONTEXT

A regional commitment by CARICOM Heads of Government is to lower the region's US\$ 6 billion food import bill by 25 per cent by 2025. This is to be achieved by displacing 25 per cent of the region's agrifood imports by 2025, in order to promote greater food security and economic self-sufficiency.

However, to achieve this, addressing NTMs, particularly those related to agri-food products, has been identified as a major concern in supporting increased intra-regional trade to achieve the 25 per cent target. A comprehensive review of NTMs related to exports is therefore critical as the region moves towards increasing intra-regional trade in agri-food products. These plans are already well underway with technical work being led by the CARICOM Ministerial Task Force on Food Production and Food Security (MTF) under the leadership of President Ali from Guyana. However, while significant progress continues to be made, Prime Minister Mottley noted at the 44th Regular Meeting of CARICOM Heads held in February 2023 that work was still required to address SPS barriers which affect the movement of agri-products within the region.¹³ Accordingly, research conducted by the World Trade Organisation (WTO) indicates that "the negative effects on trade caused by the diversity of TBT/SPS measures and domestic regulations in services can be mitigated by the harmonisation and mutual recognition of these measures" (World Trade Report, 2012).

Special focus has been placed on products such as niche vegetables, corn, soya, rice and poultry in the regional plans to increase food production.¹⁴ As it relates specifically to poultry products, the high production value of livestock products in the Caribbean makes it an attractive commodity for income generation by farmers. However, the higher cost of production represents a significant obstacle for small farmers, limiting their ability to enter the market.¹⁵ Addressing the challenges faced by small farmers, such as access to affordable inputs and technology, in order to promote the growth of the livestock sector and enhance food security in the region is essential.

3.4 SUMMARY OF NTMS RELATED TO 'GRAINS' IMPORTS

A total of thirteen (13) NTMs were identified through UNCTAD's TRAINS Database applicable to the imports of 'grains' -wheat, maize and soya bean (the list can be seen at Annex 2). The key NTMs applicable relate to Sanitary and Phytosanitary Measures (SPS) such as import authorization and certification, fumigation and inspection requirements and Technical Barriers to Trade (TBT) such as labelling specifications, quality and quantity standards for the products.

¹¹ See <u>https://www.fao.org/3/a1250e/annexes/CountryReports/Barbados.pdf</u>.

¹² See <u>https://www.poultryworld.net/poultry/barbados-poultry-farmers-losing-1-mln-a-month/</u>.

¹³ See https://guyanachronicle.com/2023/02/19/president-ali-introduces-new-plan-to-boost-food-security-in-caricom/

¹⁴ See <u>https://caricom.org/25-by-2025-reduction-in-the-regional-food-bill/</u>.

¹⁵ See www.caribank.org/sites/default/files/publication-resources/Study%20on%20the%20State%20of%20 Agriculture%20in%20the%20Caribbean.pdf

4. STAKEHOLDER IDENTIFICATION

4.1 COORDINATING AGENCY

The Ministry of Agriculture, Food & Nutritional Security was identified as the focal point, given the focus of the project on "staple food" products. The Ministry's mandate is "to transform and re-position the Agricultural Sector in Barbados through the promotion of an agri-business approach to farming, with particular attention being paid to the effective use of resources, as well as the adoption of appropriate technology and sound management practices in order to achieve internationally competitive production, processing and marketing enterprises, which contribute significantly to social and economic development and food security, as well as to the sustainable management of the natural resource base of the country."¹⁶

In collaboration with the Ministry, the intermediary inputs under review emerged as critical given the level of imports into Barbados as well as their importance to the domestic supply of poultry for consumption by the local population. The Ministry endorsed the objectives and approach of the toolkit and has both the technical resources and political positioning to support the successful implementation of the project as well as the policy reforms which will emerge from a robust process of stakeholder engagement and technical analysis with the deployment of the toolkit. Furthermore, the Ministry facilitated the establishment of a list of key stakeholders to be interviewed (the list can be seen in Annex 3).

4.2 NTM FOCAL POINTS IN REGULATED FIRMS

The key importers of 'grains' and manufacturers of 'bakery products' include Purity Bakeries, Zephirins, Roberts Manufacturing, Pinnacle Feeds (a subsidiary of Roberts Manufacturing). These firms represent the large manufacturers and importers of wheat, maize, and soya beans. The Barbados Egg and Poultry Producers Association (BEPPA) and the Barbados Agricultural Society (BAS) represent commercial poultry producers of varying sizes.

4.3 FOCAL POINTS IN NTM IMPLEMENTATION AGENCIES

Five (5) key agencies are responsible for the design and implementation of NTMs related to the importation of wheat, maize, and soya bean for Barbados (see list of NTMs in Annex 4). These agencies are the Ministry of Agriculture and Food Security regulator for importation of plant and animal products, the Barbados National Standards Institute (BNSI) and the Department of Commerce and Consumer Affairs, both responsible for standards development and enforcement respectively, the Ministry of Tourism and International Transport, regulator for the transport requirements for grains and the Ministry of Health and Wellness responsible for undertaking inspections for importation of food products such as wheat.

4.4 OTHER GOVERNMENT AGENCIES

Other important government stakeholders include the Barbados Customs and Excise Department, Barbados Port Inc., Barbados Agricultural and Marketing Corporation (BADMC); Export Barbados; the Ministry of Energy and Business Development; and the Ministry of Finance and Economic Affairs.

¹⁶ See <u>www.agriculture.gov.bb</u>

5. STAKEHOLDER ENGAGEMENT/INTERVIEWS: KEY FINDINGS

The stakeholder engagement process clearly followed the guidelines provided in the cost-effectiveness toolkit. An inception meeting was held with both private and public stakeholders, followed by in-depth one-on-one interviews. Meetings were held using both face to face and online formats. This section will provide an overview of the key findings from consultations held, including major challenges and potential areas for improvement of the NTM design, implementation and compliance processes. The findings therefore represent a summary of key points from the interviews conducted with key public and private stakeholders.

Box 1. Key Pillars of NTMs Cost-Effectiveness Toolkit

The benefits of an NTM critically depend on the design process. For an NTM to successfully attain policy objectives relating to health, safety or security, the design process should start with clearly defining the problem to be addressed. Considering policy options, international standards, views of experts and stakeholders is essential to ensure that an NTM achieves its objective and is beneficial for all parts of society. It may be hard to quantify the benefits of an NTM but following good regulatory practices in the process of designing NTMs will go a long way in ensuring that benefits are achieved at the lowest possible economic cost.

NTM Design and Implementation

A well-designed NTM may still fail to meet the desired goals if it is not enforced well. Implementation agencies need to have a clear understanding of what the NTM objectives are and then plan its implementation by allocating the necessary resources – financial, human and technological. An ill-planned approach to implementation and lack of proper monitoring of implementation processes can become a source of frustration for businesses. Sometimes, the implementation itself can be an expensive process requiring significant investment in infrastructure, technology or even day-to-day administration. At all points, the objective must be to ensure that the requirement to comply with an NTM does not become an unnecessary burden on those regulated i.e. the private sector, but also on the enforcing agency.

NTM Compliance

Compliance with an NTM can be demanding on businesses – financially and procedurally. Businesses may be required to buy new equipment, introduce new production processes, hire and train additional staff, or pay a high fee for obtaining a license or permit prior to import. In addition, the administrative costs for making notifications, publishing information and record keeping can become an added source of pressure for the private sector. As such, the need to assess these compliance related challenges becomes critical to improving NTM design and implementation and to ultimately eliminate procedural obstacles and minimize costs.

Source: UNCTAD's NTM Cost Effectiveness Tool Kit (2020).

5.1 NTM DESIGN

Interviews were conducted with the three (3) main public stakeholders involved in NTM design for the products under review. These were the Plant Quarantine Division of the Ministry of Agriculture, Food & Nutritional Security, the Department of Commerce and Consumer Affairs and the Barbados National Standards Institute (BNSI). Generally, there was a clear rationale and clearly defined objectives behind the NTMs in place. As it relates to the Barbados National Standards for food products, there was alignment in the design process with International Standards such as Codex Alimentarius Standard for Wheat Flour. Some of the key areas where further improvements can be made to the NTM design process include:

Inclusion of Importers in the NTM design process: The key importers consulted indicated that they were not heavily involved in the process of NTM design. While there was an understanding of the rationale behind the measures, in most cases to protect consumers, one of the firms consulted believed that this too was the objective of their company, ensuring safe products are supplied to their customers. In this regard, there was the view that the design process could be tailored to suit the specific circumstances of importers of the products under review, who are consistently importing the products for their production process on a weekly basis. For example, while an import permit is valid for a 6-month period, it was noted that this period could be extended given that the products are imported consistently on a weekly basis, and consistently from the same exporting country.

However, it was highlighted that as it relates to the ongoing review and updating of legislation related to NTMs, extensive consultative sessions were held with stakeholders, which also included the private sector.

 Timely Review and Updating of NTM-related Legislation: Most of the requirements related to the import of 'grains' fall under the Plant Protection Act of 2007 and a suit of Barbados National Standards. It was noted that a new piece of Plant Protection legislation was awaiting proclamation and the process of updating the National Standards was underway. Additionally, it is crucial to note that the private sector should make better use of these affordable Standards to ensure compliance before products reach the border.

5.2 NTM IMPLEMENTATION

The interviews with the key entities responsible for implementation of NTMs revealed that there were clearly defined procedures and requirements for NTM implementation. The key areas identified for improvements were:

Implementation of Risk-Based Approach for Inspections: The implementation of ASYC-UDA World has resulted in significant improvements in the business environment for importers. There are areas still requiring urgent attention such as the development of risk management procedures for some of the agencies. By doing so, fewer inspections would be required based on the risk management profiles developed. To support the importance of this undertaking, one firm indicated that they were importing 1-2 containers of product on a weekly basis for their manufacturing processes and inspections were required on each occasion. It was also noted that on each occasion, inspections are conducted after normal working hours and overtime has to be paid to each of the agencies conducting the inspections. This was raised as being costly and burdensome on the firm's operation. Implementation of key trade facilitation commitments such as the Authorized Economic Operator could also be useful to support an improved process for experienced importers.

- Addressing Staffing Shortages Which Impact Workflows: Shortages of human resources
 were identified as a major challenge affecting the NTM implementation process. Some agencies
 indicated that between 2-5 additional persons were required to operate at optimum levels. Additionally, the import process of bulk products, which can sometimes last two weeks for discharge
 from vessels requires staff to work overtime, impacting other segments of the day-to-day operation. Moreover, it was highlighted that with the coming of modern legislation and greater requirements on staff for implementation, this area needed to be addressed with urgency.
- Use of Technology for Information Sharing for NTM Related Requirements: The ability to share more information online was identified as an area for potential improvement. Most agencies indicated that while there were existing websites, these were not updated on an ongoing basis as well as updated with current information. One private firm suggested that greater use of technology to assist with the interactions between themselves and the agencies, including as a mechanism to address any concerns that might arise, could be beneficial.
- Training of Staff on Implementation Procedures: While most staff are seasoned and knowledgeable on the implementation procedures for NTMs, it was noted that staff training was still a major priority and an area where more needed to be done. It was noted that training currently occurs on an ad hoc basis, though plans are in place to roll out a structured training programme for implementation staff. Cross agency training was also identified by one of the firms as a useful approach to treat with inspections of products.

5.3 NTM COMPLIANCE

Generally, there was a clear understanding by the private sector on the reasoning behind the NTMs in place. There was also a clear understanding by firms of the policy objectives behind the NTMs in place. One firm noted that their familiarity with the various processes meant that the associated costs and procedures were not overly burdensome. Furthermore, there is one major importer of soya bean and maize in the market manufacturing animal feeds, meaning that compliance with import procedures is concentrated with few companies. Most of the compliance related improvements were procedural. Some of the key areas for improvement in the NTM compliance identified were:

- Improvement in shipment clearance procedures: It was noted by two (2) firms that the clearance procedures at the border could be improved. One of the main challenges identified which contribute to the delays was the preferences given to cruise ships during the cruise season for vessel berthing. This means that cargo vessels would typically have to wait until a berth is available for discharge. There was one experience shared where products were delayed at the port for approximately two weeks.
- Reduction of paperwork requirements: Importers raised concerns about the amount of paperwork required for compliance. It was noted that most of the paperwork still needed to be completed manually and taken into the physical office which was described as being time consuming.
- Increase Digitization of Information and Processes: The usefulness of online mechanisms for submitting documentation was noted as a potential improvement, which would be less burdensome. One private firm suggested that a central email for registering concerns could also be beneficial in improving the experience of importers and their interactions with the agencies.

6. POLICY RECOMMENDATIONS

The policy recommendations presented in this report were developed based on interviews with multiple government stakeholders and subsequent analysis. To ensure the relevance and feasibility of the proposed measures, a workshop was held in Bridgetown on 16 March 2023, which allowed for collaborative discussions and valuable feedback from participants on the draft report.

By incorporating the perspectives of experts and stakeholders, the policy recommendations are more likely to be practical and effective in addressing the challenges and opportunities related to non-tariff measures (NTMs) in the country. The following policy measures have been proposed, with more detailed plans available in Annex 1:

- 1. Continue Improvements with Implementation of Key Trade Facilitation Commitments: In 2019, ASYCUDA World was implemented. Since then, there have been significant improvements to the way in which importers interact with both Customs and the other agencies involved in NTM implementation.¹⁷ However, implementing a National Single Window would be critical to closing some of the remaining gaps with the implementation agencies. Sufficient Stakeholder engagement will be required to ensure that the requirements of the private sector are adequately captured in the design of the National Electronic Single Window. It has been noted that this project has commenced, the implementation of which is being led by the Ministry of Energy and Business Development. Additionally, and as brought to the attention of the Government of Barbados by UNCTAD, the establishment of a Trade Information Portal should be prioritized. In serving as a one stop shop to importers for all relevant trade and import related requirements from the various Government agencies thereby, it would provide transparency and predictability for traders in line with the objective of Article 1 of the Trade Facilitation Agreement (TFA). Other TFA commitments such as articles 7.4- Risk Management, 7.5 Post-Clearance Audits, and 7.7-Trade Facilitation Measures for Authorised Economic Operators are important in supporting compliance procedures. The National Trade Facilitation Committee and its members should be the focal point in these efforts and be further capacitated.
- 2. Staff Resourcing and Training with the updating of NTM related Legislation: The need for additional human resources was identified by two (2) of the agencies interviewed. This has been highlighted as being outstanding for some time and as critical given the growing mandate of the agencies, particularly with the updated legislation and to ensure international best practices are met. Training becomes critical for current and new staff to ensure that best practices for the various compliance procedures are adapted, particularly regarding SPS and TBT "Inspection Requirements" (see Annex 2).
- 3. Joint Agency Inspections and Cross-Agency Training: Based on the interviews conducted, cross-agency training on NTM, general trade facilitation and border-agency collaboration has been identified as an area where resources can be optimized, which would improve the overall experience of importers with the NTM implementation process. This might also assist with some of the concerns raised related to payment of overtime to all agencies involved in the inspection process on a weekly basis. Plans have also been discussed regarding the setting up of a joint inspection agency and this should be prioritized as part of the overall process to improve the business environment in the country for importers.
- Implementation of a Risk-Based Approach for Inspections: Risk management is a critical feature to ensure the efficient use of resources and manage potential risks through product-

¹⁷ Furthermore, ASYCUDA World has enabled a reduction in trade transaction costs and release times, while also contributing to increased revenue collection and timely international trade statistics.

specific risk profile development. It was noted that this could be utilized more by agencies to reduce the number of inspections conducted. However, given the nature of the products analysed in this study, which can negatively impact consumer health if unworthy products were to enter the market, it was noted by one (1) agency that the inspection requirement was needed. As the number of key importers is small, a pilot can be implemented using a risk-based approach.

- 5. Engagement with Trading Partners on the full activation of development cooperation provisions in trade agreements and on strengthening the utilization of these agreements: Key development cooperation commitments contained in trade agreements should be fully activated to support building the necessary quality infrastructure to meet international standards and best practices. One such agreement is the CARIFORUM-EU Economic Partnership Agreement (EPA). Furthermore, the utilization of trade agreements, including regarding challenges with technical NTMs, should be carefully studied.
- 6. Endorsement of regional NTM data analysis exercise, including assessment of impact on export related NTMs: While the focus of the pilot project was on NTMs relating to imports, the validation session with stakeholders revealed that there was a need for increased transparency on NTMs within other OECS/CARICOM countries. Moreover, as the region seeks to increase agri-food production to ensure regional food security, SPS and TBT measures and the lack of harmonisation of regulations within the regional grouping (CARICOM) can significantly impact these plans. Lessons learnt from this pilot project can be used to support the roll-out of a regional approach to the review and implementation of NTMs to lead to greater awareness, harmonisation, and alignment with international standards to support the efforts to increase intra-regional trade in agri-products. This requires the mapping of NTMs of all OECS/CARICOM countries and subsequently a regulatory similarity analysis.
- 7. Quantification of costs of NTMs: While the project identified burdensome NTMs, it could not quantify the specific costs of the relevant NTMs for traders. This would help the for the cost-effectiveness assessment.

7. CONCLUSION

The Joint SDG Fund project of the United Nations aims to address food security challenges following the multiplicity of crisis in the Organisation of Eastern Caribbean States and Barbados. The study summarizes the application of UNCTAD's Assessing Cost-Effectiveness of Non-tariff Measures Toolkit in the grains and poultry sector in Barbados. It reviews NTMs applicable to important imported intermediate products to a national value chain of high interest for food security and encourages good regulatory practices.

The study has highlighted several areas for improvement in the design, implementation, and compliance of Non-Tariff Measures (NTMs) in Barbados. The interviews conducted with the key stakeholders have provided valuable insights into the challenges faced by importers and agencies responsible for the NTM process. While there was a clear understanding of the policy objectives behind the NTMs, it was also evident that there were areas for improvement.

In terms of NTM design, it was recommended that importers be included in the design process to better tailor the measures to their specific circumstances. Interestingly, the stakeholders interviewed did not offer any specific feedback on the design of the existing NTMs (see Annex 3 for more information on NTMs) nor did they propose any changes. This can be attributed to a certain level of satisfaction with the current NTMs. It was also advocated that NTM-related legislation be reviewed and updated in a timely manner, along with a heightened adherence to Barbados National Standards.

With regard to NTM implementation, it was noted that a risk-based approach for inspections, addressing staffing shortages, and the use of technology for information sharing were areas that required attention. It was also identified that staff training on implementation procedures and cross-agency training could be useful approaches to address some of the challenges.

The policy recommendations offered included continuing improvements with the implementation of key trade facilitation commitments, staff resourcing and training, joint agency inspections and cross-agency training, and the implementation of a risk-based approach for inspections.

Overall, the study highlights the importance of continuous improvement in the design, implementation, and compliance of NTMs to support the competitiveness of the private sector and protect consumers. To achieve this, it is important for stakeholders to engage in ongoing dialogue to identify and address challenges and implement policy recommendations. With the right policies in place, Barbados can achieve a more efficient, effective, and streamlined NTM process that supports trade and economic growth.

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ANNEX 1

Table 2: Policy recommendation workplan

Policy Option	What Specifically needs to be done?	How could this be done?	What is the overall benefit?	Who needs to be involved in the plan?	What to do next?
Policy Option 1. Continue Improvements with Implementation of Key Trade Facilitation Commitments	Convening of regular meetings of the National Task Force on Trade and Business Facilitation to monitor progress with implementation of TFA commitments	 Government Mandate for quarterly meetings of the Task Force with the establishment of task forces as needed Technical Assistance to the Committee through UNCTAD where useful and possible Prepare outcome reports from Committee Meetings and priority areas for intervention at the level of the Minister 	 Improves the trading conditions for the private sector and should aim at resulting in cost reductions with reductions in time and cost to import and export procedures Reduces time taken by agencies and cost for them to implement NTMs 	 Lead Ministry Ministry of Energy and Business Development Other key national institutions Barbados Customs and Excise Division Department of Commerce and Consumer Affairs Ministry of Health and Wellness Ministry of Agriculture and Food Security 	Engage UNCTAD for technical support with implementation of TFA commitments
Policy Option 2. Staff Resourcing and Training with the updating of NTM related Legislation	 Reallocate/ Employ additional human resources to boost capacity at the Ministry of Agriculture/Plant Quarantine Division Capacity building training for agencies implementing NTMs to ensure international best practices are adopted 	 Conduct a resource assessment across ministries and reallocate resources where possible. Employ new staff Develop annual training plans and standard operation procedure (SOPs) manuals for inspections staff 	 Improves capacity of Plant Quarantine to implement NTMs/Reduces delays to private sector Improves inspections through standardisation of processes 	 Lead Ministry Ministry of Agriculture and Food Security Other key national institutions Ministry of Finance and Economic Affairs Prime Minister's Office Ministry of the Public Service, People Resourcing & Compliance 	 Prepare a position paper based on needs assessment, including private sector perspectives and experiences Engage international partners such as UNCTAD or the United Nations Institute for Training and Research (UNITAR) to assist with capacity building training and SOP development
Policy Option 3. Joint Agency Inspections and Cross-Agency Training	 Develop protocol for joint agency inspections at the border Assign staff at the ports of entry to facilitate joint inspection process Prepare policy position paper for moving toward cross-agency inspections/cross training 	 Allocate dedicated resources to the joint agency inspection unit Legislative review to identify amendments required to facilitate cross-agency inspections Development of cross-agency training plan for implementation 	 Reduction in inspection delays and time to import 	 Lead Ministry Ministry of Agriculture and Food Security Other key national institutions Barbados Customs and Excise Division Department of Commerce and Consumer Affairs Ministry of Health and Wellness Barbados Port Inc. 	 Conduct analysis on existing models on cross-agency training for NTM implementation Engage international partners for capacity assistance to prepare recommendations for model for Barbados, including technical requirements

Policy Option	What Specifically needs to be done?	How could this be done?	What is the overall benefit?	Who needs to be involved in the plan?	What to do next?
Policy Option 4. Implementation of Risk-Based Approach for Inspections	Developing key risk-management framework within the ASYCUDA World System for all agencies	 Conduct risk assessment based on historical imports of products Implement a pilot phase for reduced inspections based on risk metrics developed 	Reduces time and cost for NTM implementation for both agencies and the private sector	 Lead Ministry Ministry of Agriculture and Food Security Department of Commerce and Consumer Affairs Other key national institutions Barbados Customs and Excise Department Ministry of Health and Wellness 	Conduct data analysis on key imports and develop risk profiles within the ASYCUDA World System.
Policy Option 5. Engagement with Trading Partners on full activation of development cooperation provisions in trade agreements	Analysis of development cooperation commitments in key trade agreements such as the CARIFORUM-EU Economic Partnership Agreement (EPA)	 Engage development partners/ international organisations for technical study on the level of implementation of these key provisions Engage in dialogue with key stakeholders, including the private sector on development and capacity needs 	Full utilisation of the benefits from trading arrangements in place	 Lead Ministry Ministry of Foreign Affairs and Foreign Trade Other key national institutions Barbados Customs and Excise Division Department of Commerce and Consumer Affairs Ministry of Health and Wellness 	Engage trading partners on gaps with implementation of key commitments contained in trading agreements
Policy Option 6. Endorse Regional NTM data analysis exercise including assessment of impact on export related NTMs.	 Collect and analyse NTM data for the OECS/ CARICOM countries Conduct review of export-related NTMs for CARICOM impacting trade in agri-food products Conduct analysis on similarity of NTMs enforced in OECS/ CARICOM countries 	 Update existing inventory of NTMs enforced in the OECS/CARICOM region Capacity building training sessions to bring greater awareness of UNCTAD's tools for NTM review and analysis Technical research and analysis intra- regional agri-food trade levels and NTMs impacting trade 	 Increases the understanding of NTMs enforced regionally Ensures review of the NTMs which impact agri-food trade as part of the 25 % by 2025 agri-food regional production plans Provides intelligence to inform decision making processes in line with best practice for NTM implementation 	 Lead Ministry Ministry of Agriculture and Food Security Other key national institutions Prime Minister's Office- Lead Head Responsible for CSME implementation 	Request engagement of UNCTAD for additional technical support for the data collection and review of export related NTMs
Policy Option 7. Quantification of costs of NTMs	Analyse the specific costs of the relevant NTMs for traders	UNCTAD does an analysis of the cost of NTMs	Identifying the exact cost can help target the NTMs that have the higher cost	Lead Agency UNCTAD with the support of the Ministry of Foreign Affairs and Foreign Trade	Request engagement of UNCTAD to conduct an analysis

Source: Own creation based on interviews and workshop results.

ANNEX 2

Table 3: Produ	Table 3: Products, import values, NTM codes and source of imports				
Value chain/ product(s)	Intermediary imported inputs/HS6 Product Code	Value of imports (2021- US\$ Millions)	Number of NTMs and NTM Codes	Source of imports	
Bakery Products	100199-cereals; meslin and wheat other than durum	0.508		United States, United Kingdom,	
Animal Feeds	100119-cereals; meslin and wheat other than seed	3.766	13 Measures – F61, A14, C3, A83, A84, B31, B42, B84, E32, P162,	and Canada	
	100590-cereals; maize (corn), other than seed	9.114	P163, A83, P6	United States and Canada	
	120190-soya bean; whether or not broken	13.509		United States and India	

Source: Compilation from the World Integrated Trade Solution (WITS) Database, UN ComTrade and UNCTAD Trains Database.

Table 4: Showing intermediate inputs by 6-digit HS code, NTM codes and Measure Description

Product name	HS Code 6 Digit	NTM codes	Measure description
Wheat	100119,100199		A14- Plants, plant products, and other regulated articles require an import permit and can only be imported through specified ports of entry. Certification and inspection requirements apply both for their import and export.
Maize	100590	A14, A83, A84, B31, B42,B84, C3,F61,P162, P163, P6, E32	A83- Plants, plant products, and other regulated articles require an import permit and can only be imported through specified ports of entry. Certification and inspection requirements apply both for their import and export.
Soya beans	120190		A84- Plants, plant products, and other regulated articles require an import permit and can only be imported through specified ports of entry. Certification and inspection requirements apply both for their import and export.
			B31- All labels used on any commodity or pre-packaged product are required to be written in the English language, although it needs not be the only language used thereon. Also, no person shall label commodities contrary to the labelling required by the relevant Barbados National Standard.
			B42- Marking requirement: In Barbados, no persons shall consign, cause or permit to be loaded on any ship any package or object of a gross weight of 3 000 kilos or over without causing its approximate weight to be plainly and durably marked on the outside of the package or object.
			B84- Measure description: Inspectors shall check periodically the accuracy of quantity and price indications marked on pre-packaged goods.
			C3- Plants, plant products, and other regulated articles require an import permit and can only be imported through specified ports of entry. Certification and inspection requirements apply both for their import and export.
			E32- No person shall sell, offer for sale or have in his possession for sale for human consumption any article of food or drink containing any artificial sweetener.
			F61- Plants, plant products, and other regulated articles require an import permit and can only be imported through specified ports of entry. Certification and inspection requirements apply both for their import and export.
			P6- There are 10 obligatory labelling standards on commodities, pre-packaged goods, products manufactured from textiles, toys and playthings, dangerous goods, brewery products, and textiles.
			P163- Requirement by the exporting country to obtain sanitary, phytosanitary, or other certification before the goods are exported.

Source: UNCTAD Trains Database.

ANNEX 3

Types of NTMs applied to selected products according to the UNCTAD NTM CLASSIFICATION 2019 VERSION

A14- Authorization requirement for sanitary and phytosanitary reasons for importing certain products- Requirement that the authorization, permit, approval or licence related to a consignment shall be received from a relevant government agency for sanitary and phytosanitary reasons, before the importation can take place.

A83- Certification requirements- Certification of conformity with a given regulation that is required by the importing country but may be issued in the exporting or the importing country.

A84- Inspection requirements- Product inspection required by the importing country; may be performed by public or private entities; does not include laboratory analysis.

B31- Labelling requirements- Measures regulating the kind, colour and size of printing on packages and labels and defining the information that should be provided to the consumer.

B42- Technical barriers to trade regulations on transport and storage- Requirements concerning certain conditions under which products should be stored and/or transported.

B84-Inspection requirements- Product inspections required by the importing country. Inspections may be performed by public or private entities; laboratory analysis is not included.

C3- Requirement to pass through specified port of customs- Obligation for imports to pass through a designated entry point and/or customs office for inspection, testing and the like.

E32-Prohibition for non-economic reasons

F61-Custom inspection, processing, and servicing fees

P6- Export-support measures- Financial contributions by a Government or public body, or by government entrustment or direction of a private body (direct or potential direct transfer of funds: for example, grants, loans, equity infusions, guarantees; government revenue foregone; provision of goods or services or purchase of goods; and payments to a funding mechanism), or income or price support, which confers a benefit and is contingent in law or in fact upon export performance (whether solely or as one of several conditions), including measures illustrated in annex I of the Agreement on Subsidies and Countervailing Measures and measures described in the Agreement on Agriculture.

P162-Inspection requirements- Requirements by the exporting country to conduct an inspection of the products before they can be exported; laboratory testing not included.

P163-Certification required by exporting country- Requirement by the exporting country to obtain sanitary, phytosanitary, or other certification before the goods are exported.

Table 5: Date of interviews

Name of Company/Ministry	Date/Time
Inception Workshop-Government Agencies	16th January 2023
Department of Commerce	27th January 2023
Inception Workshop- Private firms	2nd February 2023
Roberts Manufacturing/Pinnacle Feeds	2nd February 2023
Barbados National Standards Institute	3rd February 2023
Interview- Ministry of Tourism and International Transportation	3rd February 2023
Interview- Ministry of Agriculture and Food Security	13th February 2023
Purity Bakeries	7th March 2023
Zephrins Bakeries	7th March 2023

ANNEX 5

Table 6: Stakeholder List

Count	Ministry	Department	Name	Position
1	Ministry of Energy and Business Development of Barbados	Department of Commerce and Consumer Affairs	Betram Johnson	Director
2	Ministry of Energy and Business Development of Barbados	Department of Commerce and Consumer Affairs	Alison Archer	Inspections Officer
3	Ministry of Energy and Business Development of Barbados	Warrens Office	Francia Jordan	Permanent Secretary
4	Ministry of Tourism and International Transport		Francine Blackman	Permanent Secretary
5	Ministry of Tourism and International Transport	Maritime Division	Najla King	Director of Maritime Affairs
6	Ministry of Finance Economic Affairs and Investments	Economic Affairs Division	Richelle Gaskin	Economist (ag)
7	Ministry of Finance Economic Affairs and Investments	Economic Affairs Division	Patrick McCaskie	Director of Research
8	Ministry of Foreign Affairs and Foreign Trade	Foreign Trade	Kay Sealy	Director of Foreign Trade
9	Ministry of Foreign Affairs and Foreign Trade	Foreign Trade	Simone Rudder	Permanent Secretary
10	Ministry of Agriculture and Food Security		Terry Bascombe	Permanent Secretary
11	Ministry of Agriculture and Food Security		Keeley Holder	Chief Agricultural Officer
12	Ministry of Agriculture and Food Security		Damian Coppin	Economist
13	Ministry of Agriculture and Food Security	Plant Quarantine	lan Griffith	Plant Quarantine
14	Ministry of Agriculture and Food Security	Veterinary Services	Carolann Gittens	Veterinary Officer
15	Ministry of Health and Wellness		Janet Phillips	Permanent Secretary
16	Ministry of Health and Wellness		Stephen Harte	Environmental Health Specialist
17	Ministry of Health and Wellness		Francina Bascombe	Chief Environmental Health Officer
18	Ministry of Health and Wellness		Donna Barker	Senior Health Promotion Officer
19	Barbados Agricultural Development and Marketing Corporation		Trevor Roberts	Manager, State Trading Enterprise (Ste)

Count	Ministry	Department	Name	Position
20	Barbados Agricultural Development and Marketing Corporation		Frederick Inniss	CEO
21	Barbados Agricultural Society		James Paul	CEO
22	Barbados Customs and Excise Department		Owen Holder	Comptroller of Customs
23	Barbados Customs and Excise Department		Sonea Jordan-Clarke	Deputy Comptroller
24	Barbados Port Inc		Jane Brome	Divisional Manager, Business Development & Strategy Ag.
25	Barbados Port Inc		David Jean-Marie	Managing Director & Chief Executive Officer
26	Export Barbados		Mark Hill	CEO
27	Export Barbados		Trudy Joseph	Business Development Officer
28	Barbados Customs Brokers and Clerks Association		Beverley Collins	President
29	Barbados Customs Brokers and Clerks Association		Adrian Harewood	Vice President
30	Barbados National Standards Institution		Haydn Rhynd	Director
31	Barbados National Standards Institution		Renate Lynn Sealy	
	Private Stakeholders			
32	Purity Bakeries		John Taylor	Managing Director
33	Purity Bakeries		Maurice Clarke	Operations Manager
34	Zephirins Bakeries		Andre Zephirin	
35	Zephirins Bakeries		Devan McCartney	
35	Barbados Poultry and Eggs Association		Stephen Layne	
36	ChickMont Foods		Dominic De Freitas	Managing Director
40	Roberts Manufacturing Co. Ltd.		Adrian Yarde	Senior Manager- Farm and Logistics
41	Pinnacle Feeds(Under Robert>s Manufacturing Co. Ltd.		Denisha Mayers- Gardner	
42	ADM Barbados Mills		Karlene Nicholls	Managing Director
45	Barbados Manufacturers' Association		Shardae Boyce	Executive Director
46	Barbados Chamber of Commerce and Industry		Misha Lobban-Clarke	Executive Director
	Organizers			
48	UNCTAD staff and consultant		Ms. Kemi Linton and Mr. Ralf Peters	

ANNEX 6- FIRM AND AGENCY LEVEL INTERVIEW QUESTIONS

Firm-Level Interview Guidelines

	Question theme	Probe questions
Administrative formalities	Are administrative processes and requirements	 Please indicate all documents you are required to file/submit prior to import? At the time of import?
	streamlined?	 Is the process of preparing and submitting these documents complicated? Which documents do you find most challenging to furnish or file?
		 Are there any overlaps/duplications in documentary requirements? Please indicate where? Is there any single window?
		 How many checks/inspections do you have to go through at the border? Is there any duplication in these checks/ inspections? Do single windows exist?
Time constraints	Do firms face any time constraints when complying with the NTMs?	 How much time do you spend in preparing the documents/ paperwork? Is this time reasonable for you? Which documents are most challenging to furnish? Why?
		 How much time does the responsible government agencies take for processing your documents or applications? Does the amount of time affect your business operations in any way? Have there been any unusual delays? What was the reason for such delays and with which agency/for which requirement?
		 Do you think that the checks/inspections at the border are carried out smoothly and efficiently? Please indicate the average time taken. Are there any unusual delays? What was the reason for such delays?
Transparency	Is the private sector fully aware of all NTMs, their rationale and procedural requirements for compliance?	 Was your firm involved in the process of designing (or reviewing) this NTM? Which regulation/agency was this? What about the others? Please explain how your views were taken into consideration and if there were any conflicts? Were you satisfied with the end results?
		 Are you clear about all requirements and procedures you are required to meet when importing the product? Which ones are particularly unclear?
		• Do you understand the rationale behind these NTMs? Which ones are uncertain?
		 Have the concerned agencies made available all necessary requirements necessary for compliance available online? Can you provide a link to the website? Which agency most difficult to deal with?
		 Is the information available in an easy to understand, non- technical format? What challenges do you face when trying to familiarize yourself with these requirements? Which particular regulations are most challenging to comprehend?
		 Have you ever encountered any discrepancies in the published and the actual requirements? Please elaborate.
		 Are there frequent changes in the regulatory requirements? Are you updated about any such changes in a timely manner? For which agency/case is the problem most severe?
		 Is it easy to reach out to the government agency in case of questions or concerns? Can you please explain the process and share experiences? Which ones are particularly hard to contact?
Quality of Implementation Staff	Is the implementation staff professional and competent?	 Is the process of dealing with government agency staff smooth? What are the key issues faced? With which agencies?
		Can you recount any bad experience during the last one year where the staff looked preference during an exhibitory memory?
		lacked professionalism or behaved in an arbitrary manner?
		 In your opinion, is the staff conducting inspections at the border well trained and has the necessary knowledge and expertise on the product being inspected? Can you explain why you do or don't believe so? Have you faced any bad experience? Please explain.

Key topics of interest	Question theme	Probe questions
Agency Support	Is the firm receiving adequate support from responsible agencies to smoothen	• Have the concerned government agencies conducted any reviews on the barriers your firm is facing with respect to the requirements? Please identify cases.
	compliance?	 Has the government agency provided any checklists or guidance to make it easy for you to comply with these requirements? Which agencies have/have not?
		 Are you familiar with any mechanisms for registering complaints? If yes, please provide a reference and share any experience. If no, please indicate if the absence of such platform is an issue for you? For which requirement is the problem most pronounced?
		• Are procedures like filing applications, paying fee automated? Does that make the process more convenient for you? Please recount specific challenges.
		 Have you encountered any cases wherein technological constraints hindered the NTM implementation? Please elaborate.
Compliance costs	To what extent do these NTM impose a high cost burden on the firm?	 Is complying with these NTMs costly for your firm? How would you rate these costs? Please choose an option from below –
		o Very high o High o Average o Not very high o Insignificant
		 Please indicate and elaborate which of the following cost elements are most burdensome and indicate the corresponding requirement?
		o The fee/charges payable to agencies – One time – At the time of import
		 o One-time costs - Asset, equipment, software purchased - Fines and legal disputes - Cost of third-party services, legal or technical
		 o Recurring costs - Education Administrative (Notification, publishing of documents, record keeping) Employee training costs Costs of internal inspections - Others Overall, do these NTMs result in a higher input or production costs for your firm? If these NTMs did not exist, what else would your business have done with the money spent on ensuring compliance? Are these costs an obstacle to importing the product? How is your firm dealing with it? Can you provide detailed estimates of these costs? (Refer to Tier 3 of Data Collection)
Benefits	Does the firm see any benefits arising to it from the NTMs?	 Does these NTMs benefit your firm in any way? Please share some examples or experiences, while taking into consideration the following – o Reduction in workplace accidents o Improved product quality o Increased consumer confidence o Ease of accessing export market o Avoiding wastage in production process o Accountability for CSR objectives

Agency-Level Interview Guidelines

Key topics of interest	Question theme	Probe questions
NTM objectives	Are NTM objectives clearly defined?	 Please define the problem or risk (a market failure) that the NTM was designed to address? What was the underlying motivation/concern? Why was government action necessary? Through what mechanisms can the NTM address the policy objectives it is designed to address. Did you have any scientific evidence to substantiate this? How serious is this problem or risk under consideration? Who will be affected and what will be the nature of the impact on each group? Can you quantify this? What is the likelihood of occurrence of the primary risk that the measure intends to address? How serious would be the consequences if the risk occurred? When do you last recall the risk occurring – o After the measure was put in place
NTM design and review process	Has the NTM been designed carefully through a consultative process and by accounting for international standards?	 For all NTMs: When did this NTM come into force? For old NTMs: When was the measure last reviewed? If yes, how were these updated and on what basis? How did the risk/problem that the measure intends to address change between the time it was first put in place and when it was reviewed.? Were alternative approaches to address the problem/risk under consideration discussed? Did you take into consideration the ability of the government to implement this NTM effectively? Were all necessary stakeholders involved in the measure design (or review) process? This includes – private sector, other relevant ministries/agencies, customs, independent experts, NGOs. Please indicate, along with reasons, situations of any conflict with these stakeholders and how these was addressed? Is the regulation based on any international regulation or law? Please identify the relevant international standard and how the national standard compares to it?
Implementation process	Is the step wise procedure for Implementation clearly defined?	 Please explain the step wise process for enforcing this measure. Please identify the different documents as well as the various steps the private sector requires to ensure compliance.
Implementation time	How efficient is the Implementation process? (For NTMs related to inspections and testing)	 What is the average time taken to inspect each shipment? Have there been instances of unusual delays? For what reasons? What steps have you taken to minimize delays? For each consignment inspected during the last one year, please indicate if any specific obstacles were faced and the reasons thereof. Did these issues lead to rejection? Please elaborate on the specific case and the amount of loss.
Implementation time	How efficient is the Implementation process? (For NTMs related to license/ permit/certificate processing)	 What is the average time taken to process a new license, certificate or permit? Have there been instances of unusual delays? For what reasons? What steps have you taken to minimize these delays? For all applications/renewals processed during the last one year, please indicate any issues encountered. These may concern with such factors as - Incomplete applications Late applications Non-receipt of application fees in time

Key topics of interest	Question theme	Probe questions
Implementation costs	Does the NTM Implementation impose a high cost burden on the agency?	 Is enforcing this NTMs costly for your agency? How would you rate these costs? Please choose an option from below – Very high High Average Not very high o Insignificant. Pease indicate and elaborate which of the following cost elements are most burdensome? One-time costs such as investments in fixed assets o Recurring costs - Publicizing NTMs and updates to them Assessing and approving applications and processing renewals Conducting inspections Recruitment and training of Implementation staff Managing and resolving private sector complaints Others Can you provide cost data for all expenses pertaining to the Implementation of this NTM for the specific imported product? (Refer to Tier 3 of Data Collection)
Implementation strategy	How does the agency determine the nature and extent of the NTM's Implementation? (Applies to Inspections Only)	 Do you inspect all imported consignments? What is the probability of an import consignment being inspected at the border? Where does the inspection take place – only at the border, or even in the hinterlands? How do you decide what to inspect and what not to? Do you have risk management systems in place to determine this? How do you adapt your approach based on experience?
Transparency	Has the agency taken adequate measures to ensure that the regulated firms are fully aware of the NTM, its rationale, and procedural requirements for compliance?	 Is the NTM, its rationale and the relevant compliance requirements clear and readily available to the private sector? How? Is this information available online? If yes, on which website? Have you taken any other steps to ensure that the private sector is made aware of the requirements and where these can be found? Is this information available in easy to understand, non- technical language?
Stakeholder coordination	Is the measure implemented in coordination with other relevant government agencies such that duplication can be avoided?	 Please explain how your activities and objectives relate to those of the customs or any other government agencies? How do you coordinate with these agencies? Please indicate any instances of, reasons for, and consequences of poor coordination with either of these agencies in the past one year?
Resource allocation	Has the government agency allocated adequate resources for smooth Implementation of the NTM?	 Do you have a well-defined budget for enforcing the NTM? Have you encountered a situation in the past where there was a shortage of funds for properly implementing the budget? Please explain the situation in detail. Do you have adequate staff to implement the NTM – conduct inspections, monitor compliance or process applications for licenses, permits or certificates? What is the hiring process for the staff? Do you provide generic training activities to the staff on ensuring professionalism and transparency in their work? How frequently are such training activities provided? Can you share some content or material? Do you provide technical training activities to the staff to impart skills necessary for conducting inspections? How frequently are such training activities provided? Can you share some content raining activities provided? Can you share such training activities provide?

Key topics of interest	Question theme	Probe questions
Facilitating smooth compliance	Is the government agency talking adequate measures to identify and eliminate any bottlenecks to ensuring compliance by the regulated firms and putting in place systems that make compliance easier?	 Do you have any toolkit or checklist to aid the private sector in complying with the NTM?
		 Please indicate if and to what extent are the compliance and implementation procedures automated? (This includes permit processing, filling application forms, screening of applications, revenue collection, etc.)
		Are there established mechanisms for registering complaints?
		What are these mechanisms?
		What is the process of monitoring and addressing such complaints?
		How frequently are they used by the private sector?
		 How many complaints were received during the last one year, their nature, and how these were resolved?
		 As an agency, have you taken any steps to ensure compliance by either promoting, incorporating controls, or imposing sanctions for non-compliance?
		 Please indicate the number of instances of non-compliance with the NTM noted during the last one year. What were the specific instances for the non- compliance and the reasons thereof? How were these issues resolved?
		 Please indicate the total percentage of consignments rejected due to non- compliance, during the last one year?
Effectiveness	Is the NTM achieving the objective it is designed to?	 Would you say that the NTM is achieving the objectives it was designed for? Can you substantiate how?
		 If the NTM was recently put in place: can you provide an estimate of the potential harm mitigated between when the NTM did not exist and after?
		 If the NTM is old: How do you assess whether the NTM is meeting its intended objectives? Have there been instances where the primary risk that the measure intends to address occurred? How many such cases can you recall in the last one year? 5 years? Has there been any change?
		 Please indicate the key stakeholders who have benefitted from this NTM? How? Please refer to intermediate consumers, final consumers as well as the society at large.