



NEUTRAL POLICIES, UNEVEN IMPACTS:

Non-tariff Measures through a Gender Lens





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EXECUTIVE SUMMARY

Non-tariff measures (NTMs) are trade policy measures designed to achieve public policy objectives such as protecting public health, consumer safety, and the environment. While NTMs often bear high trade costs such as having high information, implementation, and compliance cost, they are usually necessary for achieving economic, social, and other policy goals to ensure product safety and quality for consumers.

In theory, NTMs are designed to have gender-neutral objectives, where a policy requirement is not designed to benefit/protect a particular gender or group of people. In practice, however, the impact of NTMs does not affect women and men identically. Especially, women and men are not equal when it comes to the **compliance costs** of NTMs and benefiting from the **levels of protection** provided by NTMs. In terms of compliance with NTMs, for instance, women often face more supply-side constraints, such as having limited access to resources, land, lack of skills and education, time poverty, and mobility constraints among others, which makes it more difficult for women to comply with technical regulations or standards compared to their male counterparts. On benefiting from NTMs protection, women are often disproportionately affected by technical regulations or standards for certain products (specifically products used at workplaces), where they do not consider the physical differences between women and men and are mainly designed with the male anatomy in mind.

Based on the review of a list of literature, case studies, and anecdotes, this study has looked at the gendered impacts of NTMs on women as **traders/entrepreneurs, workers, and consumers**, respectively, and aims to propose ways in which NTMs related project design, implementation and monitoring can be approached with a gendered lens.

Main hurdles faced by women as traders/entrepreneurs

As traders or entrepreneurs, women can be disproportionately affected by technical trade regulations or standards because of their high compliance costs and the existence of gendered social structures. Access to resources (i.e., technical, productive, and financial), time poverty and mobility constraints, lack of skills and expertise, and potential to experience abuses and discrimination during import/export are just a few supply-side constraints that women traders are facing when complying with NTMs. These constraints are deeply rooted in the existence of gendered social structures and are specific to country-or sector-specific contexts.

Main hurdles faced by women as workers

As workers,¹ women can often be exposed to safety and health risks if technical regulations and standards do not provide adequate protection at the workplace. This is due to the fact that regulations and standards on working gears and protective equipment are often designed with mainly the male anatomy in mind.

Moreover, some sectors including agriculture, fishery, and garment, where the major segment of workers are women are likely to be less regulated especially in developing and least developing countries. This could severely affect the health and safety of women workers.

¹ In most literature, “women as workers” refer to the impact of gender discrimination on work opportunities for women (wage gaps, career development, skills development, etc.) in the global value chain. In this study, we specifically look at how women are disproportionately affected by inadequate protection at the workplace.

Main hurdles faced by women as consumers

As consumers,² technical regulations can affect women's health and well-being if they are not gender-sensitive and do not consider the physical differences between men and women. Sometimes, certain sectors with a high share of women can be less regulated, thus posing risks to their health and well-being. For example, the pharmaceutical industry does not generally consider gender differences even though women and men respond differently to drug treatments, in some countries women are even actively excluded from drug trials. Another example could be the cosmetic industry, where there are not enough technical requirements or standards set out to provide adequate protection for women's health and safety.

Making non-tariff measures gender-responsive in principle and in practice

To address these imbalances that women face within the context of NTMs and to promote gender mainstreaming in NTMs related projects, this study has proposed a practical guide that can serve as a starting point to approach NTMs related programmes with a gendered lens. The practical guide covers gender mapping, needs assessment, and potential way ahead/policy interventions through better NTMs (i) design, (ii) implementation, and (iii) compliance to ensure that women are not put in a disadvantageous position compared to their male counterparts.

Practical guide to approach non-tariff measures related programs with a gendered lens

Gender Mapping	Get a gendered picture of the economy and the sectors that are relevant for women. Collect qualitative and quantitative statistics by sex such as number and percentage of male/female-owned small and medium-sized enterprises (SMEs) in the sector of interest, access to the product value chain, etc., through a variety of tools that could include literature reviews, focus groups, surveys, consultations, and community and social mapping.
Needs Assessment	Carry out needs assessments to ensure "gender-responsive" program design and the identification of possible areas of intervention. For example, it is critical to analyze the roles, needs, priorities, and interests of women and men (as traders, consumers, or workers) within a given value chain, and to understand if there are specific constraints or challenges for women compared to their male counterparts. Next, analysis on the root cause of such challenges should be undertaken to understand if the cause can be addressed by or arises from NTMs design, implementation, or compliance . This would allow programs to identify areas where specific measures to advance women traders, workers, and consumers are required.
Way Ahead	Depending on the root causes identified, how can NTMs be designed or implemented better; and how can compliance with them be enhanced to ensure that women are not disproportionately affected?

² The focus on "Women as consumers" here is on how technical regulations/standards affected women differently to men in terms of the levels of protection that is offered, which complements to the traditional notion on women's consumption patterns.

(i) NTMs Design

- Examining existing standards/technical regulations to make sure they are gender-sensitive.
- Redesigning technical regulations/standards to suit the distinct needs of women based on gender-oriented criteria that take into account biological and cultural differences.
- Putting in place adequate technical regulations/standards for risky activities in which women are involved to ensure their safety and well-being.
- Promoting training materials and exchange of best practices with other sectors, regions or countries.

(ii) NTMs Implementation

- Enhancing training of officials (implementation, inspection and custom), including workshops to raise awareness of gender issues; not only at the main formal border crossings but especially at border crossings used by informal traders.

(iii) NTMs Compliance

- Designing capacity building programs with gendered considerations i.e., providing training suited to the needs of women and men.
- Ensuring that women' participation in training by creating incentives as necessary.
- Ensuring that any tools and programs designed for traders can be easily and directly accessed by women.
- Creating platforms for reporting complaints on harassment.
- Targeted social policies and work programmes to complement better trade policies.

1. INTRODUCTION

Support towards women's participation in international trade has increased significantly in the past few years. Data and research both indicate a potential positive relationship between women's economic opportunities at the international level and their competitiveness and productivity.³ By providing employment opportunities and enhancing consumer choice, trade can expand women's role in the economy, thus driving their economic empowerment (World Bank, 2020).

However, research indicates that the involvement of women in trade continues to be low. While trade *can* substantially improve economic outcomes for women, these positive effects can materialize only if the barriers that limit their participation in trade are minimized (ibid). Often, women face disproportionately higher barriers of entry to trade than men. Resource, information, time, and mobility constraints are just a few examples of the impediments women encounter in actively participate in international trade.

In 2017, at a World Trade Organization (WTO) Ministerial Conference held in Buenos Aires, 121 members and observers endorsed the "Buenos Aires Declaration on Women and Trade" with the objective of advancing women's economic empowerment through enhanced participation in trade. One of the critical elements of this declaration is the **identification of barriers that limit women's participation in trade**.⁴

³ Trade liberalization does not always benefit women (see for example UNCTAD, 2004), yet the uneven impacts of non-tariff measures affecting women, the focus of this report, is unlikely to become an advantage for them if they face higher trade barriers compared to men.

⁴ WTO members have created a *Draft Ministerial Declaration on the Advancement of Gender Equality and Women's Economic Empowerment in Trade* to be adopted during

The declaration acknowledges "*international trade and investment are engines of economic growth for both developing and developed countries, and that improving women's access to opportunities and removing barriers to their participation in national and international economies contributes to sustainable economic development*" (International Gender Champions, 2018).

Women contribute to international trade as producers, entrepreneurs, workers, and consumers. Amongst the many barriers they face, limited attention has been paid to regulatory factors which can have important bearing on access to international markets, value chain upgrading, and women's health and safety. These challenges are mostly concerned with the incidence of **non-tariff measures (NTMs)**.

NTMs are policy measures, other than ordinary customs tariffs, that can potentially have an economic effect on international trade in goods by changing quantities traded, or prices, or both (UNCTAD, 2019). Their primary objective is to protect public health, the environment, or national security, among others. However, they also substantially affect trade through information, compliance, and procedural costs. NTMs can take the form of technical measures or non-technical measures:

- **Technical measures**, includes sanitary and phytosanitary (SPS) measures and technical

the WTO Twelfth Ministerial Conference (MC12) in 2022. The declaration reaffirms the objectives of the Buenos Aires Declaration. It gives the WTO Secretariat a role in coordinating trade and gender research, including on the impact of the COVID-19 pandemic on women. Furthermore, it recommends building a work plan towards MC13.

barriers to trade (TBT). They are product-specific requirements, mostly designed for public policy objectives to protect health, safety and the environment, such as packaging requirements, maximum residual limits of chemicals, and related inspections and certification;

- **Non-technical measures**, which include a wide array of trade-related policies such as quotas, non-automatic import licensing, rules of origin and price control measures.

While NTMs are “*de jure*” considered gender-neutral, yet women and men are not equal when it comes to compliance with NTMs and to benefit from the levels of protection NTMs provide. Women are often affected by NTMs differently than men – sometimes inadvertently, and sometimes due to pre-existing gender norms.

To ensure that NTMs do not become challenges to women’s participation in trade, gender needs to be mainstreamed in assessing the impact of NTMs on women in trade. This study attempts to advance the discussion on the impact of NTMs on women and proposes ways in which NTMs and related projects can be approached with a gender lens. Section II introduces the two key angles with which to approach gender mainstreaming in the context of NTMs; Section III presents an analysis of the gendered impact of NTMs on women as traders, workers and consumers, respectively; Section IV concludes with proposing way ahead to addressing the challenges women face with regards to NTMs. Options to inform project design, implementation and monitoring as well as resource allocation are explored in light of the key findings in Section II.

2. GENDER MAINSTREAMING IN THE CONTEXT OF NON-TARIFF MEASURES

"If gender equality is a goal, gender mainstreaming is a strategy to achieve this goal...." (UN Women, 2002)

Gender mainstreaming is a globally accepted strategy for implementing global commitments on gender equality. It calls for an integration of gender perspectives into policies, programmes and thematic issues. The central theme of gender mainstreaming is ensuring that gender perspectives are central to all activities of programmes and projects: from policy development to research, advocacy/dialogue; from legislation to planning, implementation and monitoring. It also strives for institutional change in support of implementation of global commitments on gender equality and women's empowerment. For the United Nations, promoting gender equality at all levels is key to ensuring that both men and women can reap the benefits of development efforts (Williams, 2004).

Non-tariff measures (NTMs) are associated with high trade costs. These costs include information costs (identifying the requirements), compliance costs (meeting product requirements), costs to demonstrate compliance (e.g., certification) and indirect time costs of demonstrating compliance (e.g., delays at borders) (Shepherd and Peters, 2020). Yet, they also ensure the safety of consumers. As with any other programme or thematic issue, the implications of NTMs, in this case, the compliance costs and the level of protection provided, can be different for both men and women. Gender mainstreaming calls for unpacking these differences and minimizing them through appropriate project design and implementation to ensure that women are in no way, at a disadvantageous position.

In the context of NTMs, gender mainstreaming thus requires -

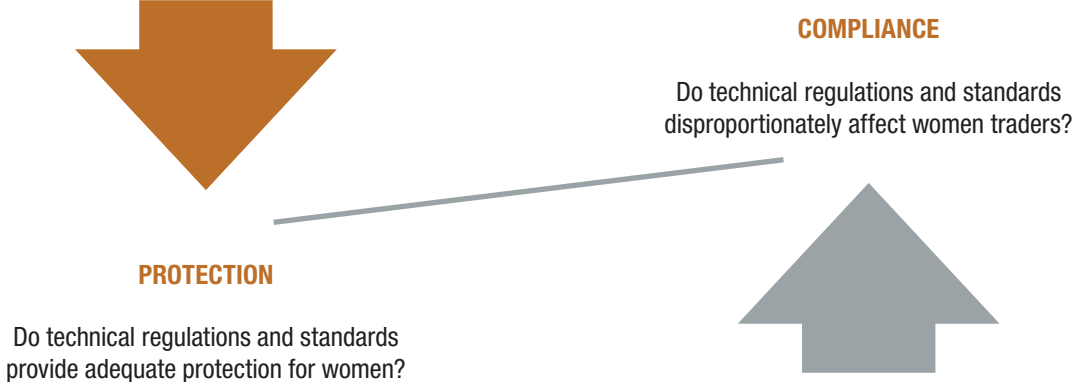
In 1997, the United Nations Economic and Social Council, in their agreed conclusions 1997/2, defined gender mainstreaming as - *"...the process of assessing the implications for women and men of any planned action, including legislation, policies or programmes, in all areas and at all levels. It is a strategy for making women's as well as men's concerns and experiences an integral dimension of the design, implementation, monitoring and evaluation of policies and programmes in all political, economic and societal spheres so that women and men benefit equally and inequality is not perpetuated. The ultimate goal is to achieve gender equality"*

- i. **Gender analysis** i.e., an assessment of how the costs of NTMs and the level of protection they provide to consumers is different for women and men; and
- ii. Use the findings of this analysis to inform **programme design, implementation, and monitoring, as well as institutional change** to address gender equality considerations.

Based on women's key role in international trade – (a) women as traders; (b) women as workers; and (c) women as consumers.

The central themes of the analysis in this study are (i) *"compliance"*, where the focus is on identifying and analyzing the nature and extent of barriers posed by NTMs on women traders; and (ii) *"protection"*, where the focus is on ascertaining whether, and to what extent, the level of protection provided by NTMs is/ can benefit women and men differently (see Figure 1).

Figure 1
Non-tariff measures and gender: The two angled approach



Source: Author's own summary.

The analysis hereafter is based on a review of existing literature, anecdotal evidence, and case studies. *The approach follows the UN Women Guidance Note on Gender Mainstreaming in Development Programming (2014).*

3. NON-TARIFF MEASURES AND WOMEN: AN ANALYSIS

Non-tariff measures can impact women differently than men in three areas:

- **As traders or entrepreneurs**, women can be disproportionately affected by technical trade regulations due to high cost of access to resources and information; high cost of compliance with the technical requirements; or harassment they are often subject to at border crossings, particularly in poorer countries.
- **As workers**, women can be exposed to health risks if regulations fail to provide them adequate protection at the workplace. Working gear, for instance is often designed with male anatomy in

mind. Further, women often act as “risk managers” in food preparation, processing and selling and thus may be particularly impacted by food-borne diseases.

- **As consumers**, technical regulations can affect women’s health and well-being if they are not gender sensitive and do not consider the physical differences between men and women. Some sectors with a high share of products for women can be less regulated, thus posing risks to their health and well-being. The cosmetics industry in some countries is a classic example of this.

Details of each category (see Figure 2) are assessed in the following paragraphs.

Figure 2
Non-tariff measures: gendered perspectives



Source: Author's own summary.

3.1 WOMEN AS TRADERS

While research has shown that the effects of trade on women are not positive under all circumstances, in fact, there is also no dearth of studies that establish that trade can, in several cases, substantially improve economic outcomes for women, by increasing employment and wages. The Addis Ababa Action Agenda (2015) highlights the importance of “*women’s equal and active participation in domestic, regional and international trade.*” As such, it will not be an overstatement to say that creating an environment where women can thrive as entrepreneurs and in export jobs can support women’s role in the economy. This makes addressing the barriers that hold women traders back a worthwhile pursuit. (Eyzaguirre, 2020).

More so than ever, access to international markets is determined by compliance with NTMs. While NTMs are rarely designed with any gender consideration, and empirical studies to assess the impact of NTMs on women are sparse, there are plenty of case studies and instances of anecdotal evidence which suggest that NTMs affect women disproportionately.

A World Bank and World Trade Organization (WTO) study in 33 countries estimated that women-led businesses are subject to trade costs that are 13 per cent higher than those led by men (Korinek et al, 2021). Product standards⁵ and certification procedures, burdensome customs, and administrative procedures, and obtaining import licenses are examples of measures that make it costly for firms to export and import and are exacerbated in the context of global value chains, specifically so for women (UNCTAD and World Bank, 2018). UNCTAD’s work on *cross-border trade for empowerment of women and transparency in trade regulations and facilitation in the Pacific Agreement on Closer Economic Relations (Pacer) Plus* (UNCTAD, 2019a and 2019b) studies in detail the supply-side constraints that limit women traders’ participation in international trade ranging from time poverty, social issues to access to finance, infrastructure, technology, and skill development.

⁵ Standards are not mandatory regulations nor NTMs. The term standard is used here for a private or public voluntary standard. Implementing standards enables enterprises to comply with regulatory requirements as established under technical regulations.

Mendoza, Nayyar, and Piermartini (2018) analyzed market access barriers faced by households in different income deciles by matching household survey data from India based on the industrial classification of their economic activity (see Figure 3). It was found that products produced by poor workers i.e., those in the lowest income deciles face some 200 different types of NTMs whereas workers belonging to the top income decile face only 127. They noted that this implied a higher incidence of NTMs on women workers, who often tend to be overrepresented at the bottom of the income distribution since many of them work in sectors such as agriculture and food which faces many NTMs related to production and hygiene standards.

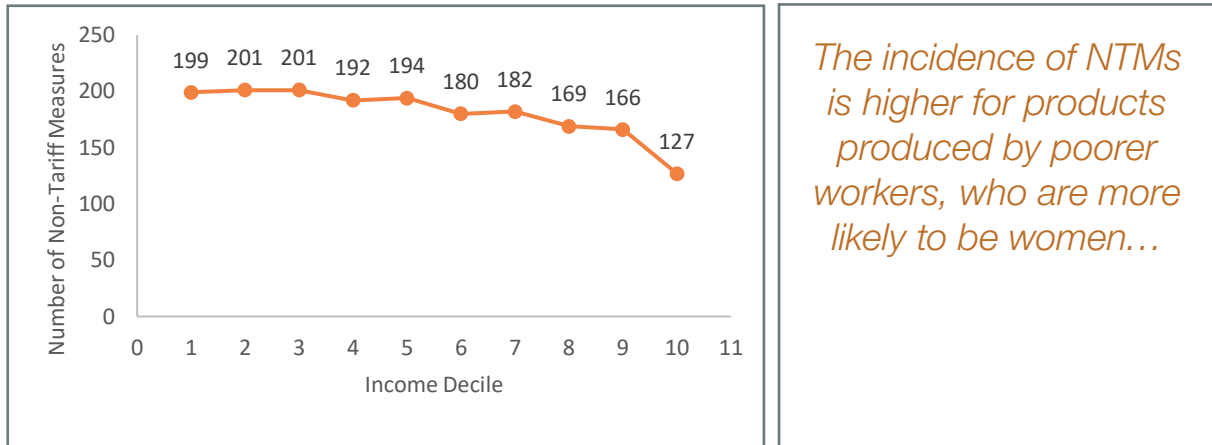
Survey evidence from Pakistan covering 1,200 companies suggests that 66 per cent of women-owned exporting companies report facing difficulties with NTMs, compared to 51 per cent of men-owned firms. These difficulties are due to either regulations being too strict or complex to comply with or related procedural obstacles making compliance to given regulations difficult. Specifically, these measures include Pakistani export regulations pertaining to inspection, export restrictions, and difficulties with tax rebates on exported products. Conformity assessment is yet another common challenge reported as burdensome by 38 per cent of the respondents (ITC, 2020).

This comes as no surprise since compliance with NTMs (i.e., meeting product standards, certification procedure, etc.) requires significant financial and human resources, which women-owned enterprises tend to lack. In addition, complying with NTMs is challenging for women not only because of the complex regulatory requirements and high costs associated with it but also due to the constraints posed by socio-economic factors that affects women differently (Eyzaguirre, 2020). For example, women often take up the caretaker role of households which leaves them limited time and mobility opportunities in participating in international trade.

Findings of empirical studies on the disproportionate challenges women are facing in complying (access to NTMs information cost, NTMs compliance cost, and cross-border challenges) with NTMs and competing in international markets can be categorized summarized as follows:

Figure 3

Incidence of non-tariff measures by income group, based on household survey data in India



Source: Mendoza, Nayyar, and Piermartini (2018).

1. Resource constraints

The cost of compliance with NTMs often involves upfront investment and access to technical, productive and financial resources. There is a growing literature that shows how women struggle to access land, capital, and reliable infrastructure (FAO, 2010). According to the International Finance Corporation (IFC), worldwide, women's access to finance is disproportionately low. There is a \$ 300 billion gap in financing exists for formal, women-owned small businesses, and over 70 per cent of women -owned small and medium sized enterprises (SMEs) have inadequate or no access to financial services (IFC, 2017).

Many studies suggest that significant economies of scale and scope associated with the compliance process favor larger value chain actors. NTMs represent a "fixed" cost of trading and can be more prohibitive for SMEs than for large companies with high turnover, which can easily recover such costs (Eyzaguirre, 2020). Furthermore, SMEs also lack specialized teams to handle the trading process, in part because they export infrequently or in small batches. Since women-operated businesses within global value chain tend to be smaller and more informal with limitation in accessing to finance compared to those operated by men,⁶ they struggle more in

complying with NTMs, and are therefore prevented from exploiting potentially lucrative opportunities in accessing international markets.

Furthermore, due to the gendered division of labour within the global value chains, women face on average greater difficulties than men in accessing resources needed for upgrading. In the worst-case scenario, women can be completely excluded from a value chain. This has been observed, for example, in the shrimp value chain in India, where the government took steps to eliminate independent processing of shrimp (peeling at home on a piece -rate basis), an activity usually undertaken by women to ensure compliance with the European Union hygiene requirements. These new hygiene regulations prompted many fish processing plants to integrate preprocessing into their facilities thus robbing women of an important source of livelihood (Henson et al., 2004).

2. Time and mobility constraints

Another key challenge for women in entering international markets and complying with complex technical requirements lies in the heavy unpaid domestic duties which women shoulder (UNCTAD, 2020). These duties create a double burden for women in combining paid work with unpaid work and result in significant time poverty and mobility constraints

⁶ Confirmed by many studies from the International Trade Centre (ITC), the Organisation for Economic Co-operation and Development (OECD), UNCTAD, United Nations, World Bank, among others. For instance, "Unlocking

Markets for Women to Trade" by the ITC (2016) provides a detailed analysis of potential barriers that explains why women-owned businesses are on average smaller and less productive than male-owned business.

in the absence of targeted social policies. For example, UNCTAD's study (2018) on the East African Community (EAC) Regional Integration showed that women can only devote 70 per cent of time that men can to unpaid work in the United Republic of Tanzania, and 80 per cent of time that men can in Rwanda and Uganda. This has limited their ability to fully comply with regulatory requirements and to engage in gainful employment, which has increased their vulnerability to job losses. In the long run, they are perceived as having low bargaining power, often work under insecure working conditions, and gradually end up constituting a flexible workforce which is temporary, casual or seasonal based (Kareem, 2017). This is especially more prevalent for women in rural and remote areas with poor infrastructure, preventing them from taking advantage of opportunities generated by trade liberalization and regional integration (UNCTAD, 2014).

3. Lack of skills and expertise

For technical measures such as sanitary and phytosanitary and technical barriers to trade, compliance requires that businesses can comprehend at least the basics of production and customs clearance processes. It has been proved that in many low and middle-income countries, women's education and literacy rates are significantly lower than that of men, hence putting them in a disadvantaged position when it comes to complying with technical regulations and standards (UNCTAD, 2019)).

This is because compliance with NTMs, specifically technical NTMs is a multi-step process (see Figure 4), requiring technical expertise, trained personnel, financial resources, equipment, paperwork, access to trainings and knowledge. The development potential of trade is therefore significantly impaired by trade costs arising from NTMs.

Figure 4
Steps in demonstrating compliance with non-tariff measures



Source: Author's own summary.

According to a 2019 Fairtrade International report, only 19 per cent of farmers in Fairtrade-certified producer organizations are women. It is argued that this is because women often lack expertise in identifying whether the products they produce meet with the corresponding Fairtrade Standards, and the ability to comprehend and meet with the complex process of certification (Fairtrade International, 2019).

4. Limited access to information; training and social networks

NTMs are very technical in nature, hence understanding and conforming with NTMs requires that actors have technical knowledge as well as the necessary information from issuing and implementing agencies across the country. The challenge is greater when regulatory requirements and NTMs related information are scattered across different ministries/agencies that implements these requirements. Lacking adequate information could keep businesses out of international markets and disproportionately affects smaller enterprises.

Generally, women are disadvantaged over men in accessing training activities (World Bank, 2020), despite adequate training being essential for value chain upgrading. This could be because women frequently do not meet the necessary requirements for participation, due to lower education levels. Often, women are unable to participate in training programs due to time and distance constraints as women are often busy taking up household duties. Worse, training programs are sometimes not inclusive enough to take into consideration the specific issues faced by women.

Moreover, there is evidence that women are less successful at seeking out new information and markets than men because they are excluded from certain social networks (Barham and Chitemi, 2009).

For example, a World Bank Survey in Fiji assessed specific challenges male and female cross-border traders are facing related to trade facilitation at the firm level. In total, there are 4702 active traders that have participated in the survey, of which 484 were women. The findings highlight that around 33 per cent of women compared to 19 per cent of men reported that information on official regulations and procedures is not easily available (World Bank, 2019).

Adding to this, with the emergence of the digitization of trade, gender differences in resources and capacities to access and effectively utilize information and communications technology (ICT) have been exacerbated. Globally, for instance, the proportion of women using the internet is 12 per cent lower than men, this gap is even bigger in the least developed countries where it reaches 33 per cent. In low-income countries, on average, women are 10 per cent less likely to own a mobile phone and 26 per cent less likely to use mobile internet than men (Kim, 2018).

5. Discrimination and harassment by officials

As traders, women also face greater levels of malpractices (i.e., sexual harassment, bribes, etc.) than men by markets and border officers, which makes them more likely to avoid official border crossings. Evidence suggests that low levels of literacy combined with lack of information on regulations and procedures have increased women's vulnerability to corruption and bribery, as well as the risk of confiscation of goods (Higgins, 2012). As such, women often try to evade meeting these difficulties (procedure requirements and harassments) by taking illegal routes. In fact, informal trade⁷ plays a key role in many developing countries, i.e., amounts to US\$ 17.6 billion per year in the Southern African Development Community (SADC), around 30 to 40 per cent of total regional trade in West Africa (UNCTAD, 2013). Women informal traders mostly trade groceries, fruits and vegetables, meat and fish products, clothes and shoes, as well as household items. Informal trade

is often considered as the only source of income for many female traders and contribute to their family subsistence and wellbeing (UNCTAD, 2019). It is important to realize that informal trade results in weakened growth opportunities for small firms and a significant loss of government revenues, and that therefore transparent regulations and simplified border procedures should be promoted.

Women cross-border traders in sub-Saharan Africa face all types of violence and harassment, including sexual, physical, economic and others. The Petite Barrière border crossing between Gisenyi, Rwanda and Goma in the Democratic Republic of the Congo accounts for one of the highest daily flows of traders in Africa; between 20,000 and 30,000 traders cross it every day. A large portion of this trade happens on a small-scale, and 80 per cent of these small-scale traders being women. 82 per cent of border agencies are men, inspection and searches are conducted by men and women are subject to beatings, strip searches and sexual harassment. A World Bank Study conducted in 2010 looking at cross-border trade between the Democratic Republic of the Congo and Burundi, Rwanda and Uganda found that the livelihoods and activities of these women traders are currently being undermined by high levels of harassment including sexual harassment and physical violence at the border and the prevalence of unofficial payments and bribes. This will have a significant impact on the livelihoods of a substantial number of women and the households who depend on their income from trading (World Bank, 2015).

Overall, the magnitude and ways in which NTMs impact women depend on many factors including the particular type of NTMs and the context in which compliance takes place. Moreover, these challenges are more present in some industries than others. Hence, more detailed research is needed on these sector-specific implications.

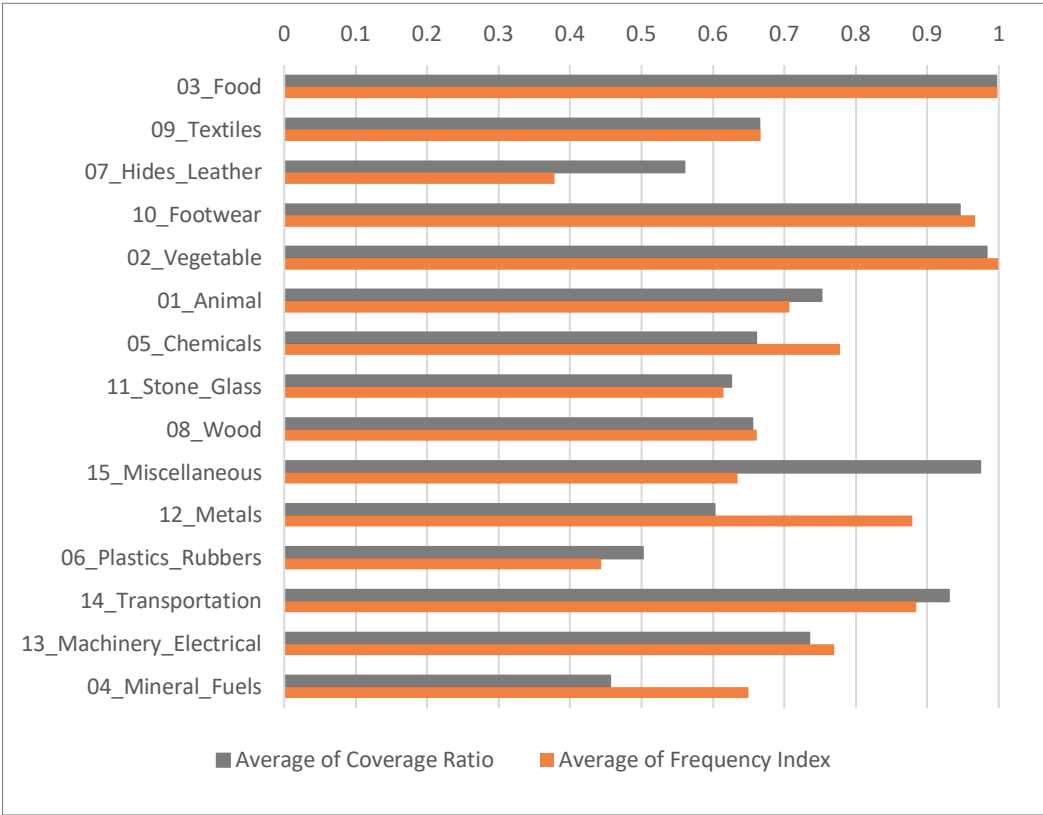
6. Sectoral trends

Aside from the size of the business which often puts women-led businesses in a disadvantageous position when it comes to NTMs compliance, the sector to which the business belongs to can often be a source of challenges as well. Women entrepreneurs are often concentrated in sectors such as agriculture, food, textiles, and footwear. Often, the prevalence and

⁷ Informal cross-border trade is defined as trade in legitimately produced goods and services that escapes the regulatory framework established by the government, thereby avoiding certain tax and regulatory burdens. These goods and services may be traded by (1) informal (unregistered) traders operating entirely outside the formal economy and passing through unofficial routes, or by (2) formal (registered) traders who fully or partially evade trade related regulations and duties (UNCTAD, 2019).

Figure 5

Coverage ratio and frequency index by sector (order by decreasing representation of women)



Source: Author’s estimates based on UNCTAD Non-Tariff Measures Data (2020).

Note: Sectors are represented in the order of decreasing representation of women-led entrepreneurs.

incidence of NTMs in these sectors can be higher, increasing the burden of compliance for them.

UNCTAD and World Bank (2018) confirm that both, the coverage ratio (share of trade facing at least one NTM) and the prevalence score (number of distinct NTM types) is significantly higher in agriculture than in other sectors. The vast majority of measures in agriculture are SPS measures and TBT. The study by Kareem (2017) investigated the implications of European Union SPS and TBT measures on gender relations in the agricultural labour market between 1995 and 2012. The dataset comprised 90 countries, covering 6 regions. It was found that women are disproportionately disadvantaged in the agricultural sector because of the effect of the NTMs and that the imposition of SPS and TBT measures by the European Union on agricultural exports has contributed to gender inequality. A 10 per cent increase in these European Union measures decreases women’s relative employment by 3.17 per cent.

NTMs can often disproportionately impact women in terms of women-led businesses as well, despite being gender and sector neutral. Figure 5 and 6 show the frequency index, coverage ratio and prevalence score by sector based on UNCTAD’s NTMs data.⁸

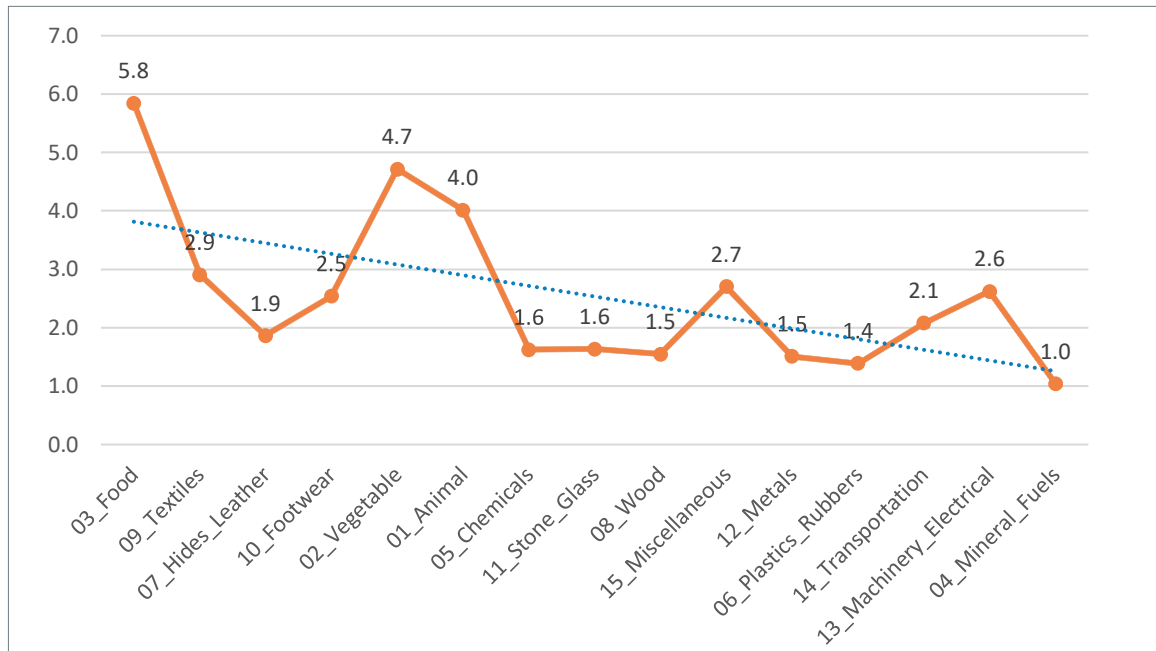
Total trade as well as number of products subject to at least one NTMs, i.e., the coverage ratio and frequency index respectively, tends to be higher in sectors where women’s share of employment is likely to be higher.⁹ Food, footwear, and vegetables are examples of sectors where women-led businesses are likely to be higher with both a coverage ratio and frequency index of 90 per cent to 100 per cent. The prevalence of NTMs i.e., the average number of NTMs

⁸ Accessed through UNCTAD TRAINS Portal (2020), <https://trainsonline.unctad.org/home>

⁹ The frequency index simply captures the percentage of products that are subject to one or more NTMs. The coverage ratio captures the percentage of imports that are subject to one or more NTMs.

Figure 6

Prevalence score by sector



Source: Author's estimates based on UNCTAD Non-Tariff Measures Data (2020) and World Bank Enterprise Surveys (2020).

Note: Sectors are represented in the order of decreasing representation of women-led entrepreneurs

applied per product also tends to be higher in sectors where women are more likely to be entrepreneurs. For instance, the food sector has the highest prevalence of NTMs across all sectors with 5.8 measures applied per product. This is a popular sector for women-led businesses. On the other hand, the prevalence of NTMs is rather low in sectors such as machinery, minerals and fuel, and transportation. In general, these sectors are likely to have a lower representation of women entrepreneurs. This indicates that women-led businesses may likely be subject to more NTMs, simply by the virtue of the sectors they concentrate in.

3.2 WOMEN AS WORKERS

Women are increasingly participating in traditionally male roles at the workplace — as welders, pipefitters, electricians, equipment operators, etc. The wellbeing of women workers is correlated to the strength and resilience of supply chains.

However, technical regulations and standards can often fail to provide adequate protection to women at the workplace, particularly in factories where risks to health and safety are high. Approximately 190 million

women are employed in global supply chain-related jobs, and women make up 60-90 per cent of workers in the labour-intensive jobs (BSR, 2021).

This could happen for two reasons –

(i) Use of gender-sensitive technical regulations -

Despite the increasing involvement of women in factory jobs, regulations on working gear for factory workers often still ignore gender differences. For instance, most protective equipment, including goggles and full body suits, are designed based on the size and characteristics of male individuals. Often, employers provide the same personal protective equipment (PPE)¹⁰ to women as to men albeit in smaller sizes. Items such as fall-arrest harnesses

¹⁰ The Personal Protective Equipment at Work Regulations defines PPE as: 'All equipment (including clothing affording protection against the weather) which is intended to be worn or held by a person at work which protects them against one or more risks to their health and safety'. It includes overalls, eye and ear protection, fleeces, knee pads, high-visibility clothing, safety harnesses, anti-stab jackets and respiratory protective equipment (RPE).

need to fit well but differences in chests, hips and thighs can affect the way that the straps fit. Such lack of consideration in regulations in terms of their failure to reflect physical differences can adversely affect the safety of women workers, exposing them to danger and even fatal injuries. For instance, ill-fitting gloves can lead to problems with gripping, while the wrong shoes or overalls can increase the chances of tripping. Similarly, if a safety vest is too large, it can become cumbersome to perform work tasks and if safety glasses aren't properly fitted, dust, debris or foreign bodies have a better chance of making contact with the eyes (Li, 2013).

In a survey conducted by the Trades Union Congress (TUC), a federation of trade unions in England and Wales, only 29 per cent of women agreed that the PPE they use is specifically designed for women. This was particularly the case with trousers, where 41 per cent of women also said that what was provided was unsuitable. 57 per cent of women claimed that their PPE sometimes or significantly hampered their work (Trades Union Congress, 2017).

(ii) Inadequate technical regulations and standards in sectors accounting for a large share of women workers

In many industries like agriculture, healthcare, apparel, fishing, and food processing, women account for a significant proportion of the workforce. Women are also more often represented in low-wage jobs in the lower tiers of the supply chain. Incidentally, these sectors and jobs often tend to be less regulated and can pose serious health and safety risks to the workers – the majority of which tend to be women. This is particularly true in developing and least-developed countries.

The garment industry's is often quoted as an example of a sector in which workers, mostly women, are routinely exposed to inhumanely high temperatures and harmful chemicals (Clean Clothes Campaign, 2020). The fishing sector is also often named. In this sector, women are mostly responsible for skilled and time-consuming onshore tasks, such as making and mending nets, processing and marketing catches, and providing services to the boats. In Western Africa and Asia, as much as 60 per cent of seafood is marketed by women. Women in West Africa specialize in smoking fish and fish products: a highly labour-intensive task. The high density of smoke

emitted poses a health risk for women (FAO, 2016). Since these activities are usually carried out at home, the hygiene standards are poor, and expose women workers to potential health hazards and in turn this has an impact in national and international market compliance.

Another example would be from the fishery sector. For fish exports from Cote d'Ivoire, pulmonary arterial hypertensions (hazardous chemical substances formed by combustion of coal, oil, etc.) were found in quantities exceeding the maximum allowable threshold required by the European Union. At very high levels, they can cause damage to red blood cells, liver or kidneys. A survey of fish processors, 90 per cent of which were women, indicated that only 10 per cent of the women were aware of the harmful effects of pulmonary arterial hypertension released during the smoking of fish. Absence of quality control measures to reduce exposure to pulmonary arterial hypertension and to increase awareness regarding pulmonary arterial hypertension among fish processors are detrimental to women workers' well-being (ibid).

3.3 WOMEN AS CONSUMERS

On top of being traders and workers, women are consumers and often primary buyers for the household. In developed countries, women seem to make more ethical consumer choices than men (Hagen, 2014). However, they are widely under-represented in the development of standards ranging from the products we consume every day and, the technology used to the infrastructure on which our economies depend. As such it could potentially widen the already existing and large gender gap. Non-tariff measures, in the form of technical regulations or standards, can have a disproportionate effect on women's health, including female consumers, by failing to provide adequate safety and protection.

This can take two forms -

(i) Gender-neutral technical regulations for products consumed by both men and women.

Women are different to men, anatomically and physiologically: their metabolic rates, size, drug treatment response, etc. all vary. Lack of knowledge and data on this, as well as absence of gender-based

criteria for regulatory design, can result in technical regulations and standards being lacking in many respects, unintentionally.

The pharmaceutical industry is a classic example of how products are sometimes designed and tested based on regulations that do not recognize the needs of different genders. For example, the United States Food and Drugs Administration (FDA) has found that women experience adverse and serious reactions to pharmaceuticals more often than men. Presumably, this is because men and women tend to be different in their responses to drug treatments. In response, the FDA recommended in 1993 that separate standards/regulation for the analysis of men's and women's responses to drugs be elaborated (Parekh et al, 2011). This is however still a pressing and unresolved issue in many of the developing countries. Another commonly cited example concerns standards for seatbelts. Seatbelts used in cars in the 1950's did not take into consideration the bodies of women, and in particular pregnant women. As a result, women were more likely than men to sustain severe injuries in automobile crashes, which have been the leading cause of accidental fetal death related to maternal trauma for decades. Taking these differences into account has led to the development of safer seatbelts, designed for broader populations (UNIDO, 2019).

(ii) Inadequate technical regulations and standards in sectors accounting for a large share of women consumers

Some industries have a large share of female consumers. When improperly regulated, these industries can disproportionately impact women.

The cosmetics industry is a case in point. In the United States, many environmental experts argue (Narayan, 2018) that the cosmetics industry is one of the least regulated. The Federal Food and Drugs Act of 1938 which oversees domestic cosmetic companies does not require the Food and Drugs Administration (FDA) to recall potentially dangerous items or even monitor product ingredients. Inspections of cosmetic manufacturing facilities are uncommon and labeling requirements are less stringent. With the United States importing cosmetics products from all over the world, inadequate regulations can seriously impact the health of women, who are the primary consumers of cosmetic products. Studies have shown that cosmetic products can contain high quantities of hazardous chemicals and can even increase the risk of cancer, causing lasting damage to cells (The Regulatory Review, 2021). As a result, increased scrutiny of the cosmetics sector is needed to protect the safety and health of consumers.

Figure 7
Prevalence of technical barriers to trade measures in cosmetics industry vs. other sectors



Source: Authors' estimates based on UNCTAD Non-Tariff Measures Data (2020).

Globally, NTMs data shows that *Beauty or make-up preparations.....(HS code 3304)*, which includes lip and eye makeup preparations among other cosmetics products, tend to have fewer applied TBT measure,¹¹ with an average of 1.43, compared to other sectors (see Figure 7). This implies that even though these cosmetic products might impose high potential health hazards for people, but they have lesser TBT measures (with the objective to protect human and environmental health) applied to them.

(iii) Accessibility of essential products

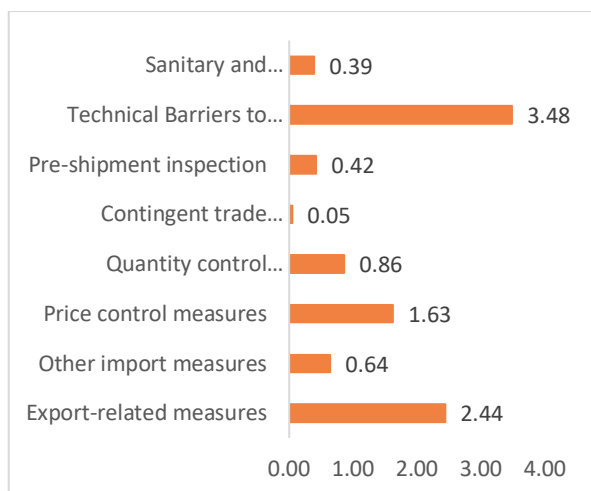
NTMs may also affect women consumers by reducing the accessibility of goods by imposing too many non-technical import measures (i.e., quotas, licensing, quantity-control measures, etc.). For instance, there is a high incidence of NTMs on the import and export of *Sanitary towels (pads) and tampons....(HS code 961900)*. The incidence of technical import measures and export-related measures is high with some countries applying over 15 measures on the product (see Figure 8). While most of these measures may be legitimate and essential for health and safety, they also imply a higher cost burden on importers and exporters of the product. On average, there are 4 technical NTMs applied to the product with a few

countries applying as many as 30 measures. While technical regulations may still be justifiable, the high prevalence of non-technical measures such as price and quantity control measures may indicate further, often unnecessary, bottlenecks to trade in these products. Up to 40 countries apply non-technical import measures on the product with a few applying as many as 11 such NTMs. This may ultimately impact consumers in terms of the accessibility and affordability of these essential goods (see Figure 9).

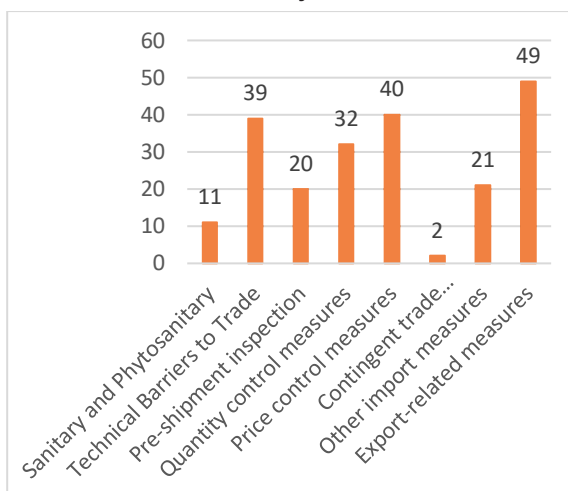
Figure 8

Overview of non-tariff measures applied to Sanitary towels (pads) and tampons, napkins and napkin liners for babies and similar articles, of any material (HS code 961900)

A. Prevalence of NTMs



B. Incidence of NTMs, by number of countries

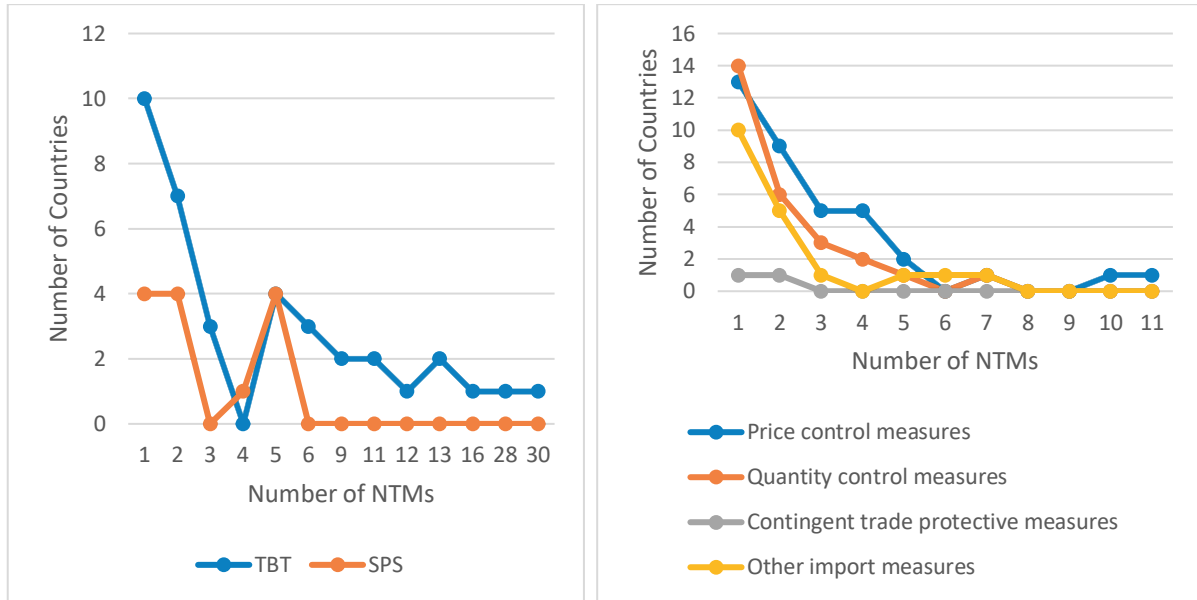


¹¹ It is important to understand that it is not the amount of NTMs applied to products that matters but the “right” NTMs that would offer adequate protection to consumers.

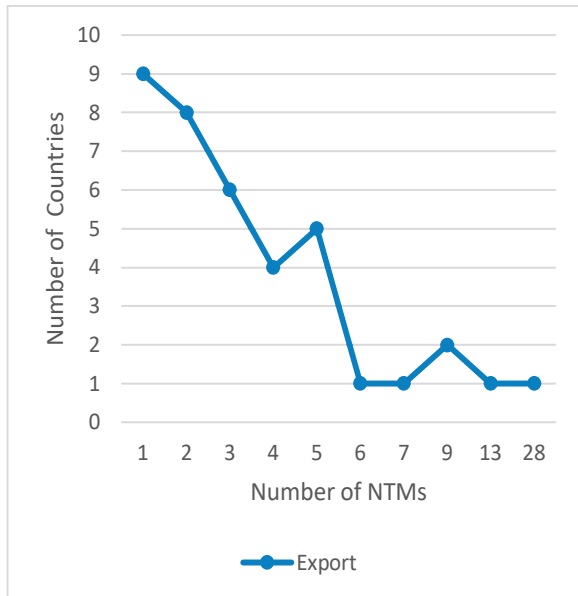
Figure 9

Number of countries using non-tariff measures

A. Import NTMs



B. Export NTMs



Source: Authors' estimates based on UNCTAD Non-Tariff Measures Data (2020).

4. DEVELOPING OPTIONS FOR MAKING NON-TARIFF MEASURES GENDER-SENSITIVE IN PRINCIPLE AND PRACTICE

From the analysis in the previous sections, it is clear that gender mainstreaming in the context of non-tariff measures (NTMs) requires a multidimensional approach based on improvements of NTMs in *(i) design, (ii) implementation* as well as *(iii) compliance* to ensure that women are not put in a disadvantageous position compared to their male counterparts (see Figure 10). This section provides a practical guide to inform NTMs project design, implementation and monitoring. It shares good practices from across the globe where gender mainstreaming has been adequately promoted as far as technical regulations and standards are concerned. This section also provides way ahead for

promoting gender mainstreaming in NTMs design, implementation, and compliance.

Non-tariff measures program design, implementation, and monitoring

Traditional trade programs mainly focus on trade outcomes, measuring quantitative economic results, changes in regulations, or capacity-related indicators. To address the existing gendered trade gap and promote gender mainstreaming, gender-related aspects have to be carefully integrated into trade programs and in the context of NTMs.

Figure 10
Definition of non-tariff measures design, implementation and compliance

NTM Design	NTM Implementation	NTM Compliance
<p>The benefits of an NTM critically depend on the design process. For NTMs to successfully achieve the public policy objectives relating to health, safety and security, the design process should start with clearly defining the problem to be addressed and following good regulatory practices.</p>	<p>Critical to the success of NTMs lies in enforcement. 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. At all times, the objective shall be to ensure that the requirement to comply with an NTM does not become an unnecessary burden on those regulated.</p>	<p>Compliance with an NTM can be demanding on business – financially and procedurally. Businesses may be required to buy new equipment, introduce new production processes, or pay a high fee for obtaining a license/permit. As such, the need to assess these compliance-related challenges becomes critical to improving NTM design and implementation and to ultimately remove procedural obstacles and minimize costs.</p>

Source: Assessing cost-effectiveness of non-tariff measures – A toolkit, UNCTAD (2020).

Against this backdrop, this section provides a practical guide (see Box 1) that may serve as a useful starting point to approach NTMs related programs with a gendered lens to cover gender mapping, needs assessment, and way ahead in program design, implementation and monitoring.

Firstly, to reflect gender aspects adequately in trade-related interventions, proper **gender mapping** is needed. It is important to have a gendered picture of the economy and the sectors that are relevant for women as these can be possible areas to advance equal empowerment of women and men. For example, qualitative and quantitative statistics by sex such as number and percentage of male/female-owned SMEs in the sector of interest, access to the product value chain, etc., should be collected in trade programs (for needs assessment, impact assessment, achieved results) through a variety of tools that could include literature reviews, focus groups, surveys, consultations, and community and social mapping. Furthermore, data can be further disaggregated by geographical location, age group, poverty level among others. UNCTAD has carried out pioneering work in this area: a Trade and Gender Toolbox¹² has been developed to provide ex-ante evaluation of the impact of new trade policies on women and gender inequalities prior to their implementation.

Secondly, **needs assessments** shall be carried out to ensure “gender-responsive” program design and the identification of possible areas of intervention. For example, it is critical to analyze the roles, needs, priorities, and interests of women and men (as traders, consumers, or workers) within a given value chain, and to understand if there are specific constraints or challenges for women compared to their male counterparts. Next, analysis on the root cause of such challenges should be undertaken to understand if the cause can be addressed by or arises from NTMs design, implementation, or compliance. This would allow programs to identify areas where specific measures to advance women traders, workers, and consumers are required.

¹² The [UNCTAD Trade and Gender Tool Box](#) has been applied to the Economic Partnership Agreement between the European Union and the East African Community, and is used to assess the likely impact of the Economic Partnership Agreement, mainly through employment, on gender equality and the well-being of women in Kenya, a partner country in the East African Community.

Finally, based on the data acquired from gender mapping and on the root causes of gender inequality identified through needs assessment, proper **policy interventions** to improve NTMs design (gender-sensitive focused), implementation (i.e., transparency in information, reduce high procedure costs) and compliance (i.e., skills/knowledge development, access to technology, finance, etc.) should be proposed.

Way ahead with regards to NTMs design, implementation and compliance are further elaborated in the following paragraphs. The points mentioned below are presented to encompass all issues identified in our study.

4.1 NON-TARIFF MEASURES DESIGN

For national governments, when designing technical regulations or standards which encompasses NTMs, it is recommended to incorporate a gendered lens to ensure the following:

(i) Greater female representation (or involvement of gender experts) in regulatory and standards-setting bodies

Enhanced participation of women and gender experts with adequate knowledge of how women may be disproportionately affected in regulatory/standards-setting agencies can improve women’s empowerment and gender equality, especially for women as traders (i.e., ensure regulatory requirements are not overly burdensome), workers (i.e., enabling women to enter professions that are previously male dominated) and consumers (i.e., ensures that products predominately used by female consumers are adequately regulated).

While the overall participation of women in standards-setting bodies worldwide is low, there have been many initiatives over the years to support equal participation of women in standards development. This includes the launch of ISO 26000, for example, (a standard that offers guidance to organizations on social responsibility) which has engaged six main stakeholder groups from over 80 countries and international organizations and aimed to strike a balance between male and female members. This standard has caused an increasing female representation in standards setting bodies of 9 per

Box 1: Approaching non-tariff measures related programs with a gender lens: A practical guide

1. Gender mapping (better data for better policy)

- What is the proportion of men and women in the sector or region of interest (as traders, workers, or consumers)?
- What are the roles that men and women play in a particular value chain? Are they different?
- What is the percentage of female owned SMEs/business in the sector of interest compared to men? What about the percentage of female employees?

2. Needs Assessment

- What are the needs, priorities, and interests of women and men at the local level?
- What specific constraints do women face that are different from their male counterparts?
- What is the level of access to resources (i.e., technical, productive and financial resources; training/seminars, etc.) for women compared to their male counterparts?
- Do the roles that women play within value chains result in different challenges for women than they do for men? (For instance - if more women are involved in at-home processing activities, they may be exposed to different health hazards than men)
- What is the root cause of the challenges?
 - o Do the technical regulations/standards account for biological and cultural differences between men and women? (Protection)
 - o Are the regulations/standards well implemented without harassment of women (Protection)
 - o Are products for women properly regulated? (Protection)
 - o Are women traders, workers and consumers well informed about NTMs information and compliance requirements through internet-based platforms/ tools or capacity building training? Do they have access to digital technologies and finance? (Compliance)
 - o Do women find it difficult to trade due to stringent technical regulations/standards (Compliance)? (E.g.: women may be unable to export because of limited access to certifications and licenses)
- Is the root cause at the NTMs design level; implementation level; or compliance level?

3. Way Ahead/Policy Interventions

- Depending on the root causes identified, how can NTMs be designed or implemented better to ensure that they are gender-sensitive; and how can compliance with them be enhanced to ensure that women are not disproportionately affected due to lack of awareness or necessary skills/knowledge?
 - o **Design**
 - Examining existing standards/technical regulations to make sure they are not gender biased.
 - Redesigning technical regulations/standards to suit the distinct needs of women based on gender-oriented criteria that take into account biological and cultural differences.
 - Putting in place adequate technical regulations/standards for risky activities in which women are involved to ensure their safety and well-being: e.g.: food/shrimp processing.
 - Promoting training materials and exchange of best practices with other sectors, regions or countries.
 - o **Implementation**
 - Enhancing training of officials (implementation, inspection and custom), including workshops to raise awareness of gender issues; not only at the main formal border crossings but especially at border crossings used by informal traders.
 - o **Compliance**
 - Designing capacity building programs with gendered considerations i.e., providing training suited to the needs of women and men.
 - Ensuring that women' participation in training by creating incentives as necessary.
 - Ensuring that any tools and programs designed for traders can be easily and directly accessed by women.
 - Creating platforms for reporting complaints on harassment.
 - Targeted social policies and work programmes to complement better trade policies.

Note: The above recommendations may be used both specifically in non-tariff measures related project as well as in general circumstances.

cent from 2005 to 2009.¹³ In the long run, more female representation and leadership is needed to ensure that gender issues are on the agenda of these organizations and gender specialists accompany technical experts on member delegations.

The United Nations Economic Commission for Europe (UNECE) is at the forefront in promoting the development and implementation of gender responsive standards and contributing to increased female participation in standards-setting bodies. UNECE has surveyed many of the standard-setting bodies to assess the current participation of women in their activities and to identify gaps in women's involvement. UNECE has recommended that a more balanced participation of men and women is important to achieve a socially desirable objective and a higher quality of final outcomes in all sectors (UNECE, 2019).

The inclusion of women in standard-setting bodies and processes is not only a necessity to support women's physical participation, but also to ensure that even if women are outnumbered, their voices are indeed heard. Due to a variety of reasons, including stereotypes and gender roles, women are not assuming leadership positions in standardization policies. There is also a need to further engage women in standard setting activities. For example, the International Telecommunication Union (ITU) has launched an initiative to promote the negotiation skills of women involved in standard-setting¹⁴, which is very important for increasing their influence.

(ii) Gender-based criteria in regulatory and standards design

Technical regulations should be based on impact assessments that take into account the gender dimension and standards referenced in technical regulations should also be based on scientific research that takes into account the impact of standards on women. For example, when updating a new technical regulation, it is important to conduct an impact assessment to ascertain the manner in which it affects women's health, rights and gender equality in general. Standards referenced in the technical regulations should be also developed with an eye to ensuring gender equality.

In practice, some countries are in fact quite advanced in developing gender-responsive standards, forming good practices which other countries with similar capacities can replicate. For example, the South African Bureau of Standards (SABS), which is a signatory to the UNECE Declaration on Gender Responsive Standards and Standards Development (see below), has committed to ensuring gender-sensitive criteria in standards for women's wear (see Table 1).

In addition to country efforts, at the international level, the UNECE Gender Responsive Standards Initiative, launched in 2016, is one of the most important pioneers in the design of gender-responsive standards. The initiative has the objective to integrate a gender lens in the development of standards

Table 1
South African Standards Bureau - Women's Wear Standards

SANS 111	Women's workwear – Covers the material, cut, make, and trim of workwear for women.
SANS 434	General protective clothing – Includes provision for men's and women's measurements for the South African body shapes and sizes, as well as maternity shapes and sizes.
SANS 1812	Manufacture of washable, usable sanitary towels.
SANS 1261-2	Performance requirements for retail textiles – Specifies performance requirements for piece goods for women's and girls' wear.
SANS 1482	Ladies' shoes, flat lasted, with stuck on outer soles – specifies requirements for material and construction for ladies' shoes made in accordance with flat-lasted stuck on principle.

Source: South African Bureau of Standards (SABS).

¹³ ISO 26000 - Social responsibility- International Organization for Standardization.

¹⁴ See ITU workshop: <https://www.itu.int/en/ITU-T/wise/Pages/WTSA-16-WISE-Workshop.aspx>

and technical regulations as well as elaborate gender indicators and criteria that could be used in standards development. It brought together a diverse working group consisting of representatives from standardization bodies, policymakers, experts on gender issues, and international organizations to facilitate engagement by the global community.

The Gender Responsive Standards Initiative has taken many actions to address critical gender gaps for women traders and workers, including promoting the development of standards to provide *protection* to women at the workplace and provide support to women-owned SMEs in implementing standards. An important effort in this direction is the drafting of the *Declaration on Gender Responsive Standards and Standards Development*. Since the launch of the declaration in May 2019, more than 75 standards developing bodies have become signatories and committed to making their standards and standards-developing processes gender-responsive. By signing the Declaration, parties pledge to create and implement gender action plans to support a more gender-balanced standards development process and to strengthen the gender responsiveness of standards themselves (UNECE, 2019).

The World Trade Organization (WTO) also has an important role to play in promoting gender mainstreaming in the promulgation of technical measures (sanitary and phytosanitary (SPS) and technical barriers to trade (TBT)). The new *Ministerial Declaration on the Advancement of Gender Equality and Women's Economic Empowerment in Trade to be adopted at the WTO Twelfth Ministerial Conference (MC12)* gives WTO Secretariat the role in coordinating trade and gender research and serve as a platform to discuss gender aspects of SPS and TBT measures. This came as a benefit of Member States consistently raising gender issues and pushing gender to become a regular agenda item of the WTO.

Regional Trade Agreements (RTAs) or Free Trade Agreements (FTAs) could also encourage the development of gender-responsive norms and standards in their SPS and TBT chapters, in particular concerning product safety, by promoting the use of gender-based criteria during the standards development process. A positive development in this direction is the inclusion of Gender Chapters in several FTAs, including the Chile-Canada FTA, Chile-

Argentina FTA, and Canada -Israel FTA signed in 2019.¹⁵ All three FTAs dedicate an entire chapter to gender related issues. However, it is important to note that these gender chapters lack specific commitments and obligations. Except for the Canada-Israel FTA, the other two lack binding dispute settlement mechanisms. While this is a good start, additional efforts and a broader international consensus will be necessary to ensure gender is mainstreamed in FTAs/RTAs in a more concrete manner.

(iii) Adequate regulation of sectors with high representation of women traders, workers or consumers.

To ensure that technical regulations and standards provide adequate protection to women consumers and workers, more research and higher priority from the international community to identify industries that put women workers and consumers at high risks should be put on the agenda (i.e., healthcare, pharmaceutical, agriculture, fishery, etc.). Moreover, depending on the feasibility and potential impacts, more regulations and standards may be designed for such industries. For example, in the past, earthmoving equipment used in construction had not been adapted to women operators. The International Organization for Standardization (ISO) has updated ISO 3411 standard on earthmoving operator dimensions to design the operator interface to ensure that both the comfort and safety of female operators are accounted for.¹⁶ As such, although more NTMs on product standards and performance have been established for earthmoving equipment, this has in fact contributed to increased comfort and safety for women workers.

Another good example would be the pharmaceutical sector, where women's participation in clinical trials has improved over the years due to government policies. This has resulted in the Food and Drugs Administration (FDA) in the United States recommending a separate analysis of men's and women's responses to drugs in 1993. More recently, the FDA Office of Women's Health (OWH) has been established by congressional

¹⁵ The [Canada-Chile Free Trade Agreement](#) (2019), the [Argentina and Chile Free Trade Agreement](#) (2019), and the [Canada-Israel Free Trade Agreement](#) (2019).

¹⁶ *ISO 3411:2007*. Earth-moving machinery — Physical dimensions of operators and minimum operator space envelope.

mandate to advocate for the participation of women in clinical trials and the analysis of data by gender. OWH supports studies to track the participation of women in clinical trials and collaborates with FDA to conduct training, workshops, outreach, and research to improve clinical trial design, recruitment, and analyses (FDA, 2019).

4.2 NON-TARIFF MEASURES IMPLEMENTATION

Proper implementation of NTMs on the ground can ensure women are not disproportionately affected and thus ultimately excluded from productive activities. This can be achieved through -

(i) Capacity building on non-tariff measures implementation

Institutions responsible for the global governance of NTMs as well as national governments play an important role in promoting gender mainstreaming in the implementation of NTMs. In this regard, capacity building at various levels is necessary: government agencies or standards-setting bodies, implementation/inspection agency staff, and customs officers.

Through actively communicating with women traders and understanding their needs, government agencies can design capacity-building programs for implementing staff. The United Nations Industrial Development Organization (UNIDO), for example, is quite active in offering training activities or technical assistance to national governments in this area.

For inspection and customs officers, regular capacity building training can be offered on customs rules and procedures, as well as to prevent and mitigate the risk of gender-based violence against women (i.e., harassment), or discriminatory treatment of women. Good practices include the effort from the World Customs Organization (WCO) in promoting gender equality and diversity in customs. The WCO has launched several initiatives and tools since 2013 including the establishment of the Gender Equality Organizational Assessment Tool (GEOAT) that enables customs administrations to self-assess their existing policies and procedures on gender equality to identify areas where improvements are needed. Moreover, since 2018, the WCO developed a blended training

package “Advancing Gender Equality in Customs”. This training package hosted on the CLiKC! Platform offers workshops specifically targeting middle to senior customs officers focusing on how to implement gender equality in customs with both theory ‘and practical exercises. For example, participants are asked to put themselves in the shoes of a manager having to improve safety and overall performance at a border post (World Customs Organization, 2019).

(ii) More women implementation staff (inspection/customs officials) to ensure good code of conduct

Another important tool of gender mainstreaming in NTMs implementation is to increase women’s representation as custom officers and inspection staff to build a more diverse workforce and mitigate gender-based violence and harassment, as well as discrimination. Furthermore, having female customs officials/inspection staff present at the border with decision-making power, can be reassuring for female traders.

According to WCO statistics, 87.5 per cent of all heads of customs administrations are men. There are a total of 22 women in that position worldwide – 7 are from developed countries (representing less than 20 per cent of all developed countries), and 15 are from developing countries (representing less than 10 per cent of all developing countries). This complicates things for women traders by subjecting them to potential physical and sexual abuse from border officials or to being charged illegal fees because they cannot read a receipt (Hall. A. and Oliver. J, 2013).

Several of UNCTAD’s and other donor-funded projects have addressed gender-responsive border management in Eastern and Southern Africa.¹⁷ Such projects have highlighted the need for implementation and frontline staff to better reflect the demographics of traders and surrounding societies, including sex, ethnicity, language, etc. with the aim of protecting women’s rights and designing as well as implementing suitable supply side services that support cross-

¹⁷ UNCTAD’s project on [Informal cross-border trade for empowerment of women, economic development and regional integration in Eastern and Southern Africa](https://unctad.org/project/informal-cross-border-trade-empowerment-women-economic-development-and-regional-integration) (<https://unctad.org/project/informal-cross-border-trade-empowerment-women-economic-development-and-regional-integration>), and World Bank’s project on [Great Lakes Trade Facilitation Project for Africa](https://www.worldbank.org/en/projects-operations/project/P1500000115000000).

border trade flows. Although many of these projects are related to borders in Africa, they do provide practical guidance for work in other geographical areas with significant cross-border trade.

4.3 NON-TARIFF MEASURES COMPLIANCE

To strengthen compliance with NTMs, various actions from national governments in collaboration with international organizations can be made in developing/improving targeted social policies to address gender related imbalances in trade and providing capacity building plus targeted gender-mainstreaming packages for women traders.

(i) Development of targeted social policies and public work programmes

As mentioned in section 3, complying with NTMs is challenging for women due to the complex regulatory requirements and high cost associated with compliance that affects them differently. Hence, capacity development for women in accessing technology, information, and understanding trade policy is necessary to assist them with compliance with NTMs. However, what is often overlooked in capacity building is how women's capacity in compliance is often more subtly affected by socio-economic constraints that are deeply rooted in society. As such, working on the symptoms (i.e., strengthening women's understanding and capacity on NTMs) alone is not sufficient. Targeted social policies and public work programmes addressing gender-related imbalances in trade should be promoted at the same time to ensure women are not disproportionately affected by trade policies.

Trade policies have different impacts on women and men in society due to the existence of gendered social structures. In most societies, women are primarily responsible as caregivers in the family, whereas men were considered as "breadwinners". As a result, women often have weaker bargaining power in the household. This, in turn, has contributed or reinforced women's weaker access to household resources, where they have sometimes none or little formal asset ownerships, receive less education and training than men or have less time and mobility opportunities to engage in out of home productive activities. Within industries, gender norms also shape occupational segregation, where women often take up less skilled and less managerial positions (Berik, 2012). All of

this shows that different outcomes by gender are expected since trade policy is implemented in the context of gendered social structure, where inequality already exists in households and the labour market.

Policies or programmes to promote women's access to international trade and compliance with NTMs cannot be treated in isolation. It is important to implement educational programmes, active labour market policies, and social protection all in an integrated manner to pursue gender equity.

The following advancements could contribute to achieving gender equality in trade and compliance with NTMs:

- Improve women's participation in international trade through investment in education, specifically in rural areas. Reduce gender educational gaps not only through education per se but also a greater emphasis on the quality of education.
- Making it easier for women to participate in international trade on equal terms as men by easing women's unpaid workloads and households (i.e., providing childcare and infrastructure investment).
- Support rural livelihoods through reduction of gender gaps in assets and inputs and encouragement of producer cooperatives.
- Improve the quality of jobs for women through stronger enforcement of labour market policies and infrastructure investment.

(ii) Capacity building to enhance non-tariff measures compliance

Capacity-building projects and programmes should be delivered in a manner that facilitates the participation of women. Direct support, such as seminars, training sessions, and quality promotion activities should systematically include female traders and entrepreneurs. This will require the identification of the demographics in the region and sector, as well as identifying gaps that restrict women's participation in existing programmes. Women traders are often unable to attend seminars or trainings due to domestic responsibilities, long distance; to the venue or simply the discouragement from attending trainings with male participants. Further, lack of access to digital technologies, is key in assisting traders in complying

with regulatory requirements also affects women. Over the years, the global customs community has identified a number of disruptive technologies to help promote women's access to and benefit from trade (WTO, 2019). However, many of the most powerful technologies for women, especially SMEs, are cell phones and the internet. While the gap between women's and men's access to cell phones and the internet has shrunk in the global north, the gap is still prevailing in the global south, including Africa, Asia and the Pacific (ITU, 2019). That being said, women traders who lack access to cell phones and the internet, also have limited access to information on regulatory requirements, standards, as well as to key services such as financing and training.

Hence, in practice, any technology intended to simplify and improve customs procedures as well as improving transparency on regulatory requirements must be provided in a manner that facilitates comprehension by all, including less-literate women traders who lack access to the internet and cell phones. National governments along with international organizations should consult with cross-border associations and women's associations to understand the most beneficial format and accessible platforms to make information available to women (i.e., media campaigns, booklets, SMS, TV, radio, etc.), as well as making an effort in providing training for women traders on navigating these platforms. In addition, regarding the aim of capacity-building, it should be centered on a long-term and systematic development of an NTMs compliance strategy instead of focusing on compliance of a particular NTMs for market access. In this way, it can enhance the capacity of women-owned businesses to comply with emerging technical NTMs in a strategic manner. For example, capacity-building could be centered in the following areas:

- **Skills development:** assisting women's access to basic and higher education enhances women's expertise in the production of higher value-added products. Workshops and training activities should be held for women traders to explain the basics of international trade, trade requirements (NTMs) and procedures, existing trade initiatives or trade facilitation, as well as their rights and obligations. Such training or awareness-raising sessions should be introduced through women's associations and/or cross-border trade associations. Moreover, training activities should take into account literacy and language of the participants.
- **Access to digital technology:** developing/expanding digital infrastructure in middle and lesser developed countries that promote women's access to and benefit from trade, and which provide targeted training for women traders in gaining from trading opportunities using digital technology through collaboration with women's trade associations and cross-border associations.
- **Access to trade -related information:** bringing together women traders and informing/training them about established mechanisms for improved transparency, such as internet-based platforms or one-stop-shop to acquire NTMs related information, compliance requirements or places to register complaints, and voice concerns. Information could be communicated through community forums, radio and TV, and the distribution of brochures or booklets to raise awareness. Making trade information openly available and easily accessible to traders could also be effective in preventing potential abuse/discrimination, since lack of trade-related information by women traders can create opportunities for corruption.
- **Encourage public-private dialogue:** Holding awareness-raising sessions targeted to women traders on how to trade successfully, including Q&A sessions which can build a social rapport between traders and policymakers, implementation staff and customs officials. Moreover, encourage women traders to use existing monitoring and reporting tools (i.e., UNCTAD's NTB reporting, monitoring and eliminating mechanism) that keeps their identity confidential yet collects concerns from the reporters. This would allow agency staff to take timely measures to identify and address any bottlenecks that women traders are facing to ensure easier compliance with regulatory requirements. Furthermore, by building mutual understanding and respect, it might also enhance the development of gender-sensitive regulatory requirements (NTMs) and reduce corruption and violence by officials during implementation and enhance compliance by women traders.

Box 2: Skills development for women in the gemstone jewelry value chain in Afghanistan

In Afghanistan, while women face limitations and constraints in participating in trading and marketing of gemstones and jewelry, they are extensively involved in adding value in the value chain through home based -polishing and the design of gemstones. To empower women and promote women's access to gemstone trading, the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) has provided capacity development for women to address existing barriers in access to skills and knowledge. The program has established 6 training centers, equipped with machines for advanced production. Training on cutting, polishing, design, and business planning among others were provided to women. Furthermore, video tutorials on jewelry making techniques targeting women's work at home were developed and transmitted directly to women with a TV screen. With the support of GIZ, improved processing within the gemstone value chain, has increased income and sales for the business by 47 per cent per year. Additional jobs have been created, especially for women.

Source: Hagen (2014).

An important effort supporting women traders in building their capacity for international trade is the WTO-led Aid for Trade Initiative. The Buenos Aires Declaration has highlighted Aid for Trade as a key instrument in supporting member States in *“analysing, designing and implementing more gender-responsive policies.”* The majority of WTO's donor and partner countries' aid-for-trade strategies seek to promote women's economic empowerment, especially for women traders/entrepreneurs. There have been many capacity building and standards compliance projects taken out by members under their aid-for-trade strategy. A success story would be the case in Madagascar, where trade capacity building in complying with European regulations on litchi food safety has resulted in increased export in the country and more women involved as producers in the global value chain (Boghossian, 2019).

Box 2 illustrates a good example of skills development training for women workers in Afghanistan.

With respect to access to digital technologies and trade-related information, awareness-raising sessions or training sessions could be organized together with representatives of women traders and entrepreneurs to inform them and allow them to familiarize themselves with the use of internet-based platforms, tools and packages that provide information on NTMs compliance, or register complaints. Box 3 and 4 provide practical illustrations of such training packages offered by national initiatives in collaboration with international organizations.

Another practical example could be the Non-Tariff Barriers (NTB) monitoring, reporting and eliminating mechanism (can be accessed online and through mobile)¹⁸ implemented by UNCTAD in Africa (East African Community, Common Market for Eastern and Southern Africa, and Southern African Development Community), where it allows companies, including micro, small and medium enterprises to register and report on NTBs they face in day-to-day operations. The tool provides timely discovery of barriers to trade and supports national governments in receiving the complaints in real-time. Since most trade in Africa is informal and a large percentage of cross border traders are women, the tool can be helpful in allowing women traders to voice their concerns or grievances of stringent trade requirements anonymously and to facilitate compliance with regulatory requirements. This will in turn increase the participation of women in international trade and create broader opportunities for women's empowerment (UNCTAD, 2021).

Effectively voicing concerns could even improve the design of standards and technical regulations. The overly stringent aflatoxin regulation and beef

¹⁸ As part of the African Continental Free Trade Area (AfCFTA), UNCTAD worked with the African Union to develop and implement the continent's Non-Tariff Barriers Reporting, Monitoring and Eliminating Mechanism. The tool can be accessed through: <https://www.tradebarriers.org/>. The NTB reporting mechanism is built on strong legal foundations. Annex 5 of the AfCFTA Protocol on Trade in Goods establishes institutions and mandatory procedures to ensure NTB complaints are dealt with adequately and in good time.

hormone standards stipulated by the European Union in the 1990s is a good example to illustrate this point. The stringent requirements raised many countries' concerns about the related SPS and TBT measures, which consequently led the European Union to lower these standards through the intervention of WTO.

By expressing their concerns, the European Union's trading partners managed to remove the unnecessary obstacles caused by the measures and opened more trade and generated more employment: and even more so for women.

Box 3: Information package on technical regulations/standards

The East African Community (EAC), in partnership with the International Labour Organization, have developed a comprehensive information package (Simplified Guide/Tool) containing all relevant information on the existing policies, procedures, requirements, rules of origin, taxes, tariffs, exemptions and facilities available to cross border traders such that they can trade within the region. The main users of the package will be micro and small-scale women cross border traders and service suppliers as well as associations and networks of women entrepreneurs, service suppliers and cross border traders.

Source: International Labour Organization (2017).

Box 4: Sanitary and phytosanitary related capacity-building targeting women traders

The Enhanced Integrated Framework (EiF) supported mango producers and exporters, a sector in which there is a high involvement of women, in meeting SPS standards, including phytosanitary treatment of orchards, implementation of good agricultural practices (GAP), certification to GlobalGAP, etc. It also provided the equipment necessary for assessing the compliance of mangoes with SPS requirements at the airport, and marketing support at national and international trade events. Together with development partners and through the EiF framework, the Government of Mali established a fruit processing unit for the production of mango jam by the Djiguiya Women Cooperative of Yanfolila. With EIF support, it received ISO 22000 certification. A total of 16 women from the Cooperative were trained in quality and food hygiene standards. Mango jam is now exported to Europe, the United States, Gulf countries and North Africa. On the local market, the mango jam is sold to hotels and supermarkets.

Source: Taupiac (2016).

5. CONCLUSION

Non-tariff measures (NTMs) are becoming increasingly important for the protection of public health, safety, and the environment in which we live. High-quality NTMs can enable trade by creating trust in the quality and safety of the traded products and avoiding high compliance costs for businesses and high costs to society.

Although NTMs are in theory gender-neutral, women and men are not equal when it comes to compliance with NTMs and benefiting from the levels of protection NTMs provide. Women as traders often face higher resource constraints, time and mobility constraints, and difficulties in accessing training, information, and technology that would have otherwise facilitated their compliance with NTMs. These difficulties are not only caused by the high compliance costs of NTMs but are also deeply rooted in the existence of gendered social structures, where different policies must work in a complementary manner to pursue gender equality. In terms of protection, NTMs (technical regulations and standards) often fail to take into account the physical differences between women and men, and they are mainly designed with the male anatomy in mind. This could severely affect the health and safety of women workers and consumers. Moreover, for some sectors accounting for a large share of women workers and consumers (i.e., garment, pharmaceutical, fishery, cosmetics, etc.), the number of technical regulations/NTMs to ensure women's safety are also considered inadequate.

Mainstreaming gender issues in NTMs related projects is complex. There exist no simple standardized solutions. This report has attempted to set the stage for understanding the gendered impacts of NTMs through a review of existing literature, anecdotal evidence, and case studies. It also analyzed the incidence and prevalence of NTMs in sectors with a high concentration of female traders and consumers. In doing so, this study has attempted to propose a practical guide to approach NTMs related programmes with a gendered lens covering gender mapping, needs assessment, and way ahead/policy interventions through better NTMs design, implementation, and compliance. The cases analyzed in this paper make it clear that measures to create a more gender-equitable trade environment for women must go hand-in-hand with interventions to make NTMs gender-responsive. More specifically, it is crucial to set up gender-based criteria in regulatory and standards design; increase female representation in standards-setting bodies and custom inspection; provide capacity building on NTMs implementation and compliance; and develop target social policies and public work programmes alongside efficient trade policies to pursue gender equality. The practical guide thus developed aims to serve as a starting point for further research and analysis at regional-, country-, and sector-specific levels.

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