

A woman wearing glasses and a checkered shirt is standing in a field of young plants, possibly a vegetable garden. She is holding a smartphone in her hands and looking at the screen. The background is filled with rows of plants supported by stakes.

Gender and Sanitary and Phytosanitary Measures in the Context of Trade:

A Review of Issues and Policy Recommendations

Spencer Henson



International Centre for Trade
and Sustainable Development

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ABBREVIATIONS

CAC	Codex Alimentarius Commission
CPM	Commission of Phytosanitary Measures of the IPPC
EIF	Enhanced Integrated Framework
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
GATT	General Agreement on Tariffs and Trade
GVC	global value chain
HACCP	hazard analysis and critical control point
IPPC	International Plant Protection Convention
ISO	International Organisation for Standardization
ISSO	international standards-setting organisation
ITC	International Trade Centre
MSMEs	micro, small, and medium-sized enterprises
NEPC	Nigeria Export Promotion Council
NTM	non-tariff measure
OIE	World Organisation for Animal Health
SDG	Sustainable Development Goal
SPS	sanitary and phytosanitary
STDF	Standards and Trade Development Facility
TBT	technical barrier to trade
UNECE	United Nations Economic Commission for Europe
UNIDO	United Nations Industrial Development Organization
WTO	World Trade Organization

FOREWORD

The political momentum for using trade policy to support women's economic empowerment is undisputable. In Buenos Aires this past December, 118 World Trade Organization members and observers took the unprecedented step of supporting a Declaration on Women and Trade, which sets out a two-year timeframe for action. This coalition has pledged, among other commitments, to address knowledge gaps and take steps towards supporting greater participation for women in trade.

The ICTSD New Thinking on Trade and Gender project aims to increase understanding of the gender dimension of trade and investment policies and agreements in sectors and areas that are under researched. This paper falls within that project and is part of a series of publications that examine the gender dimension of global value chains as the structures of international production networks evolve towards higher intensity of standards, digital transactions, and services inputs.

The paper, authored by Spencer Hansen, Professor in food economics at the University of Guelph, studies the gender dimensions of sanitary and phytosanitary (SPS) measures in the context of trade. The author argues that these food safety regulations have distinct impacts on women who participate in global value chains (GVCs) affected by SPS rules in export destinations. By virtue of their relative lack of resources, smaller-sized firms, and vulnerability as workers in precarious positions in the GVC, they can find compliance with SPS measures to be particularly challenging. Through an analysis of the literature, and discussion of several case studies, this paper sheds light on women's experience with SPS standards to date. It calls for SPS capacity building that addresses the specific constraints that women face and facilitates their participation.

From a policy perspective, moving forward in this area requires the integration of gender into the global governance of SPS measures in the WTO and international standards-setting organisations in a process driven by the leadership of the secretariats of these organisations and of influential member states. The author calls for greater participation of officials with expertise in gender amongst the national delegations to the SPS Committee, and suggests that a rapid assessment tool for identifying the gender issues associated with trade-related SPS measures could help ensure their design, implementation and capacity-building is made more gender-responsive. We hope this research paper will help inform the decisions of policymakers, businesses, and relevant stakeholders engaged in international trade as they work to advance Sustainable Development Goal 5 on gender equality.



Ricardo Meléndez-Ortiz
Chief Executive, ICTSD

EXECUTIVE SUMMARY

Sanitary and phytosanitary (SPS) measures are laws, regulations, and other administrative instruments that are applied for the protection of human, animal, or plant life or health. Compliance with trade-related SPS measures involves a multi-stage and iterative process that can be costly, and requires access to an array of technical, productive, and other resources that are often lacking in low and middle-income countries.

Compliance with trade-related SPS measures can have significant socio-economic impacts on the populations of low and middle-income countries, including women. The fact that socially-constructed entitlements and responsibilities differ between men and women determines (and at the same time reflects) the prevailing distribution of resources, access to livelihood opportunities, participation in information and knowledge sharing networks, decision-making power, and legal, social, and political rights. The gender issues associated with SPS measures have, however, received limited attention to date. This report provides a review of these issues and makes the case for gender mainstreaming across the SPS arena, both nationally and internationally.

There is evidence that women face a significant burden complying with SPS requirements, predominantly because they lack critical skills and/or face greater difficulties than men in accessing the necessary resources. Because women-headed businesses tend to be smaller, they struggle with scale issues given the significant fixed costs associated with compliance. Women, furthermore, are vulnerable to the changes that occur in the structure and/or *modus operandi* of global value chains as a result of the compliance process. They can see their livelihoods eroded or, in extreme cases, be excluded from global value chains altogether. This has been seen, for example, in the shrimp value chain in South Asia, where compliance with EU hygiene requirements has acted to exclude women at various levels of the chain.

In some circumstances, the upgrading of global value chains in response to trade-related SPS measures can present opportunities for the economic empowerment of women, although they often lack the skills and resources required to successfully exploit these prospects. Technical assistance has often been required to overcome these constraints, as has been seen with shea nut exports from Nigeria and Mango exports from Mali. Whilst there are instances where efforts to build SPS capacity in low and middle-income countries have had a gender focus, this remains the exception rather than the rule.

The efforts to integrate gender into SPS capacity-building by the Standards and Trade Development Facility (STDF) and the United Nations Industrial Development Organization (UNIDO) are noteworthy here. Capacity-building tends to be seen largely as a technical process that is focused on the upgrading of particular food safety, plant health or animal health functions and/or compliance with specific trade-related SPS requirements. In so doing, SPS capacity-building belies the fact that women often play a critical role in the upgrading of global value chains in response to SPS measures. Furthermore, women face particular constraints that need to be addressed in ways that facilitate their access to capacity-building interventions.

Institutions responsible for the global governance of trade-related SPS measures have an important role to play in addressing the gender issues associated with trade-related SPS measures, and in promoting gender mainstreaming. The SPS Committee of the World Trade Organization (WTO) is the main forum through which member states raise concerns about trade-related SPS measures, and otherwise discuss related issues, including SPS-related capacity-building. The international standards-setting organisations (ISSOs) are responsible for establishing the international

standards, guidelines and recommendations that are the basis of global harmonisation of trade-related SPS measures. These measures and standards are a key benchmark for the compliance of WTO member states with the Agreement on Sanitary and Phytosanitary Measures. To date, limited consideration has been given to gender in the work of these institutions.

A number of practical steps can be taken towards gender mainstreaming in the promulgation and global governance of trade-related SPS measures, and in the design and implementation of SPS capacity-building projects and programs. These include promoting “best practice” in the mainstreaming of gender in capacity-building, taking account of gender in the prioritisation of SPS capacity-building, and the design and implementation of a tool for the rapid assessment of gender issues associated with trade-related SPS measures. Furthermore, concrete steps should be taken to ensure that gender issues become a routine item on the agenda of meetings of the SPS Committee and the ISSOs.

Including gender considerations in the design and implementation of SPS measures can improve the development impact of such measures, for example by bringing capacity to those who are actually implementing these measures, or by addressing gender-based constraints to successful adoption at the firm and value chain level. In so doing, SPS compliance will make a positive contribution to the attainment of the Sustainable Development Goals (SDGs). The leadership of key donors and/or influential members of the WTO and ISSOs will be critical in achieving this.

1. INTRODUCTION

The varying impacts of trade liberalisation on low and middle-income countries have long been discussed and debated. Thus, the fact that these countries differ in their ability to compete in global markets means that the macroeconomic impacts of trade liberalisation vary significantly (see for example, National Board of Trade 2013; WTO 2017; DeMarchi et al. 2018). Less attention has been given, however, to the differing micro-level impacts of trade; the ways in which it affects people *within* low and middle-income countries in terms of their livelihood, well-being, and human rights (Randriamaro 2005). For example, many elements of trade liberalisation have been considered gender-neutral, if not explicitly then implicitly through lack of attention to the ways in which men and women are affected differently.

A growing body of literature, however, recognizes that there are significant gender dimensions to trade liberalization (see for example Juhn et al. 2013; Gupta 2015). Whilst accepting that the liberalisation of trade can present valuable economic prospects for women, the literature highlights the considerable difficulties that poor women in particular face in exploiting these opportunities. Critical amongst the challenges with which women have to contend is the ability to access the resources needed both to enter and compete in demanding global value chains (see for example, Bamber and Staritz 2016; Schumacher 2014). Furthermore, in the event that they do succeed, significant additional burdens can be imposed on women in the context of the childcare and other commitments they face in the home (see for example Kabeer 2012).

In order to understand the ways in which trade liberalisation impacts men and women differently, it is helpful to focus in on the global value chains through which trade in goods and

services takes place, and the role of women within these. The International Centre for Trade and Sustainable Development (ICTSD), for example, has supported a considerable body of work on the impacts of trade policies on global value chains (see for example ICTSD 2016; Kaplinsky 2016; Redden 2017; Fessehaie and Morris 2018) and the implications for attainment of the Sustainable Development Goals (SDGs). The gendered nature of global value chains is a dominant theme in this work. Furthermore, in a trade policy context, regulations and standards emerge as a key driver of the performance of global value chains (Kaplinsky and Morris 2017).

The specific focus of this paper is on sanitary and phytosanitary (SPS) measures in the context of trade; regulations and standards adopted by states in order to control food safety and plant and animal health. Whilst there is widespread recognition that SPS measures can impede trade, and present particular challenges for low and middle-income countries (see for example World Bank 2005), the gender dimensions of these measures have been largely unexplored.¹

This paper therefore presents an overview of the gendered nature of SPS measures and related efforts to reduce or offset their trade impacts. It explores the impact of SPS measures on women, predominantly in the context of the global value chains in which they do (or do not) participate. It examines the extent to which gender issues play a role in the global governance of SPS measures and/or in capacity-building efforts aimed at facilitating compliance with trade-related SPS measures. Whilst the gender issues associated with SPS measures are shown to be both significant and complex, the paper shows how these have been given insufficient attention to date, within the World Trade Organization (WTO) and more broadly.

¹ A recent paper by Smith et al. (2018) suggests that gender is often a forgotten issue with respect to compliance with regulations and standards. Their analysis indicates that only 40 percent of voluntary sustainability standards include at least one gender issue.

The paper provides a brief overview of the nature of SPS measures, and of gender in the context of trade. Various dimensions to the gendered impact of SPS measures are then reviewed, with brief cases studies being

presented. The paper concludes by considering the related policy implications for international institutions such as the WTO, multilateral and bilateral donors, and low and middle-income country governments.

2. NATURE OF SPS MEASURES AND THE ROLE OF THE SPS AGREEMENT

The term “SPS measures” refers to laws, regulations and other administrative instruments aimed at protecting human, animal or plant life or health.² Whilst all countries apply SPS measures, the specific nature and scope of these measures varies widely, for example according to the risks a country faces and/or that country’s level of economic development. Such measures might require that agri-food products are produced, processed and/or handled in particular ways, do not contain harmful substances, or at least that the level of these substances is not beyond levels that are deemed acceptable. With respect to plant and animal products, SPS measures can stipulate that these products originate from areas that are recognized to be free of particular pests or diseases and/or that they have been treated in specific ways. Various mechanisms can be employed to assess and ensure compliance with these requirements including the inspection of facilities that produce, process and/or handle food, and the testing of food products (Grant and Arita 2017).

Through the Agreement on Sanitary and Phytosanitary Measures (the so-called “SPS Agreement”), the WTO defines the rights and responsibilities of member states with respect to food safety and plant and animal health measures that impact trade. Member states have the right to implement the protections on human, animal, and plant life or health that they deem appropriate provided that these measures do not restrict trade unnecessarily

and in a manner that is discriminatory, and that can be justified scientifically (Henson and Loader 2001). The benchmark for judging whether SPS measures are legitimate in the context of the SPS Agreement is the standards, guidelines, and recommendations of the international standards-setting organisations (ISSOs). Member states can veer from these international standards, guidelines, and recommendations, but must be able to justify the SPS measures they employ if they do so.

Alongside the SPS measures implemented by governments, a growing range of private standards has been implemented by non-government entities including individual businesses, producer and industry organisations, and third-party certification bodies (Henson and Humphrey 2011). Whilst these private standards tend to take as their starting point the regulatory requirements of the importing countries in which they are employed, they are often stricter in their requirements than official SPS measures (Fulponi 2006), and may also cover a broader range of technical barriers to trade (TBT) issues. Whilst the WTO recognises the challenges that low and middle-income countries can face in complying with private standards,³ a contention that is supported by a growing body of empirical evidence (see for example, Martinez and Poole 2004; World Bank 2005; Marx et al. 2012), there are differing views as to whether such measures are actually within the purview of the WTO (Grant and Arita 2017; Meliado 2017).

2 According to the Agreement on Sanitary and Phytosanitary Measures of the WTO, SPS measures are applied:

- To protect animal or plant life or health within the territory of the member from risks arising from the entry, establishment or spread of pests, diseases, disease-carrying organisms or disease-causing organisms.
- To protect human or animal life or health within the territory of the member from risks arising from additives, contaminants, toxins or disease-causing organisms in foods, beverages or feedstuffs.
- To protect human life or health within the territory of the member from risks arising from diseases carried by animals, plants or products thereof, or from the entry, establishment or spread of pests.
- To prevent or limit other damage within the territory of the member from the entry, establishment or spread of pests.

3 G/SPS/55.

Compliance with SPS measures in the context of trade involves a multi-stage and iterative process.⁴ It is important to recognise the various elements of this process, including the actors involved and the resources these actors need to access, in order to understand the impacts

that trade-related SPS measures have on low and middle-income countries, and on actors therein, including women. The key stages of this process are summarised in Table 1. As will be seen below, the compliance process and attendant challenges are highly gendered.

Table 1: Key steps to compliance with trade-related SPS measures

Stage	Process	Actors	Resources
Understand the SPS measure with which compliance is being required	Undertake a detailed assessment of the SPS measure so as to understand its scientific basis, level of SPS performance being required, and how compliance will be assessed.	<ul style="list-style-type: none"> Public officials Technical staff in larger firms and/or sector organisations Academic and other scientists 	<ul style="list-style-type: none"> Information on SPS measure Technical expertise Scientific publications and data
Assess the extent to which current SPS controls comply with the measure	Undertake an assessment of prevailing SPS controls across the public and private sectors and the degree to which these comply with the requirements of the measure, recognising that it may be sufficient to demonstrate that existing controls provide an equivalent level of SPS protection. In turn, identify the specific deficiencies that need to be rectified.	<ul style="list-style-type: none"> Public officials Technical staff in larger firms and/or sector organisations Academic and other scientists Consultants 	<ul style="list-style-type: none"> Technical expertise Scientific publications and data
Define the actions needed to achieve compliance	Identify the specific actions needed to rectify the identified deficiencies. These might include changes to domestic regulations and associated administrative procedures, upgrading of physical infrastructure and/or equipment (for example laboratories, food processing facilities, etc.), improve production, food production and handling practices, upgrading of surveillance and control systems, etc.	<ul style="list-style-type: none"> Public officials Private firm managers and technical personnel Consultants 	<ul style="list-style-type: none"> Technical expertise Scientific publications and data
Upgrade SPS controls	Implement the defined actions identified in the prior stage. This may involve administrative and/or managerial changes, financial investments in physical infrastructure and equipment, changes to production, processing and/or food handling practices, training of personnel, etc.	<ul style="list-style-type: none"> Public officials and service providers Private firm managers and technical personnel Consultants Training institutions 	<ul style="list-style-type: none"> Financial resources Technical expertise Technical services Equipment and input supplies Training services

⁴ Compliance with private standards involves a comparable compliance process.

Table 1: *Continued*

Stage	Process	Actors	Resources
Assess and demonstrate compliance with the SPS measure	Assess the state of SPS controls after upgrades have been completed to determine whether compliance with the requirements of the SPS measure has been achieved. This may involve the inspection of private firms, certification and/or accreditation of particular elements of the SPS control system, etc. In so doing, it may be determined that not all firms have achieved compliance and are not approved for export to the target market.	<ul style="list-style-type: none"> • Public officials and service providers • Technical staff in larger firms and/or sector organisations • Academic and other scientists • Consultants 	<ul style="list-style-type: none"> • Financial resources • Technical services
Maintain SPS capacity	Monitor and maintain SPS capacity in order to continue complying with the SPS measure and upgrade as necessary. This includes key capacities across the public and private sector and may involve the inspection of private firms, re-certification of key elements of capacity, etc.	<ul style="list-style-type: none"> • Public officials and service providers • Private firm managers and technical personnel • Academic and other scientists • Consultants 	<ul style="list-style-type: none"> • Financial resources • Technical services • Equipment and input supplies

The precise nature of the process of compliance with trade-related SPS measures varies significantly in practice, for example according to the type of SPS measure being applied, level of economic development of the exporting country, degree of development of the export sector, and the structure of the impacted global value chains. Furthermore, the compliance process often involves choices between alternative investments and other actions within and across the public and private sectors. For example, the upgrading of government laboratories versus the establishment of private testing services, and efforts to support compliance by small-holder farmers through public extension services versus incentivising lead firms to work with their small-scale suppliers to achieve the required upgrading.

Of the non-tariff measures (NTMs) that have the potential to impact trade in agri-food products, SPS measures are arguably the most pervasive (Grant and Arita 2017). Indeed, over time, the number of trade-related SPS measures globally has burgeoned (Figure 1). Furthermore, there is mounting evidence of the impact of SPS measures on trade and the associated economic affects (World Bank 2005; Grant and Arita

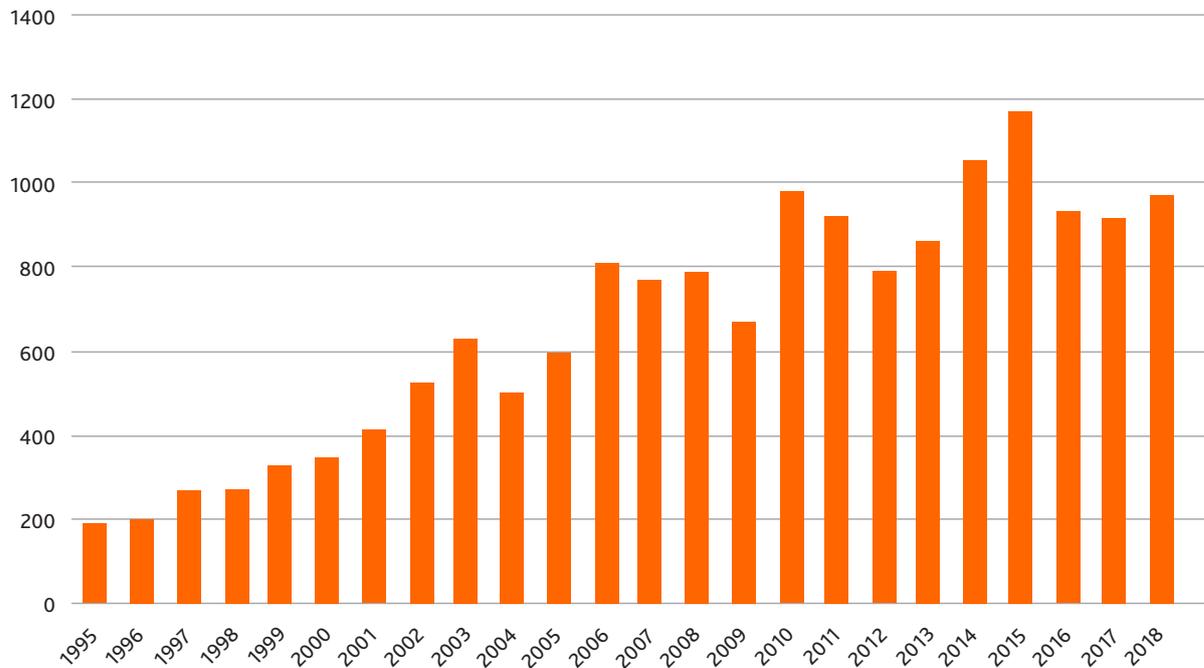
2017). Unlike other impediments to trade, SPS and TBT measures provide protection against risks to food safety and plant and animal health. At the same time, however, these measures can constitute a barrier to trade, especially where they are associated with high costs of compliance. For example, Maskus et al. (2005) calculate that the average cost of compliance with food safety requirements for exporting firms in sub-Saharan Africa is eight percent, and can be as high as 124 percent. These costs are an output of the compliance process outlined in Table 1, and vary significantly according to such factors as the prevailing level of SPS capacity in global value chains.

A growing body of literature provides a blend of anecdotal evidence, case studies and quantitative assessments that demonstrate the challenges that low and middle-income governments and exporters face in complying with trade-related SPS requirements (see for example, World Bank 2005). These challenges reflect weaknesses in the capacity to manage food safety and plant and animal health, and the problems faced in accessing the technical and other resources needed to achieve compliance with specific trade-related SPS requirements.

Considerable resources have been expended on technical assistance by bilateral and multilateral donors that aim to enhance the trade-related SPS capacity of low and middle-income countries. This assistance effectively seeks to offset the resource constraints faced at critical stages of the compliance process. Historically,

the majority of this assistance was directed at the upgrading of SPS-related infrastructure and institutions, especially in the public sector. Increasingly, however, the focus has been on the challenges faced by global value chains in seeking to comply with trade-related SPS measures (Redden 2017).

Figure 1: Regular notifications of SPS measures to the World Trade Organization, 1995 to 2018



Source: data from WTO Sanitary and Phytosanitary Information Management System, <http://spsims.wto.org/en/PredefinedReports/NotificationsSubmittedPerYearPage>.

It should be recognised that the challenges of complying with SPS measures do not always act to impede trade. Rather, the process of compliance can be a powerful catalyst of innovation and the upgrading of global value chains (see for example Dries and Swinnen 2004; Gulati et al. 2007). Henson and Jaffee (2006) show how exporters that are proactive in reacting to the challenges of

complying with trade-related SPS measures can benefit over rivals that delay investments in upgrading. Furthermore, entire export industries can reap a competitive advantage over less capable competitors, largely on the basis of the investments they have made in SPS compliance (World Bank 2005). The Kenyan fresh produce sector is an often-cited example of this (Jaffee 2003).

3. TRADE, GENDER, AND SPS MEASURES

The term “gender” refers to the socially constructed roles and behaviours of men and women, and to the relations between men and women, in specific economic, social, cultural and political contexts (Randriamaro 2005).⁵ The fact that entitlements and responsibilities differ between men and women determines (and at the same time reflects) the prevailing distribution of resources, access to livelihood opportunities, participation in information and knowledge sharing networks, decision-making power, and legal, social and political rights within both society and family units. Overwhelmingly, relations between men and women are characterised by power dynamics that privilege the interests of men and subordinate women. At the same time, however, given that the specific meanings, practices and consequences of gender norms and relations are driven by economic, geographical, political, social and cultural factors, they differ from place to place and change over time (Schumacher 2014).

Considerable attention has been given to the gender issues associated with trade. The overall picture with respect to the impacts of trade on women, notably in the context of the agri-food sector, is mixed (see for example Maertens et al. 2012). In the agri-food sector, there is evidence that increased access to employment and income in non-traditional export-oriented businesses, including fresh fruit and vegetables and cut flowers, is having positive effects on the economic and social position of women. For example, low-level employment may emerge for rural women who lack literacy, numeracy and other skills and so have limited opportunities for economic empowerment (Bamber and Staritz 2016; Kaplinsky, 2016). However, export-oriented agri-food value chains are predominantly managed by men who predominantly capture the economic benefits from participation in global value chain (see for example Dolan 2001).

There is also a growing literature that recognizes the gendered implications of trade liberalisation (see for example Aguayas-Tellez 2011), including within the agri-food sector (see for example Fontana and Paciello 2010). This literature shows how the liberalisation of trade can create opportunities within global value chains in low and middle-income countries, including potentially for women. At the same time, it highlights how women often struggle to exploit these opportunities because their disempowered position within these chains limits access to resources needed to establish and/or expand their business (see for example Kaplinsky 2017). Furthermore, women traders are typically more vulnerable than men when global value chains face competitive pressures in a more liberal trade environment (Bamber and Staritz 2016).

Whilst trade-related SPS measures are “part and parcel” of the wider trade liberalisation agenda, they are qualitatively distinct and significantly more complex in their nature and potential impacts than most other trade measures. Thus:

- They are implemented for the protection of human, plant and animal health and, as such, not only impose costs through their potential to impede trade, but can bring about significant benefits in terms of social welfare, for example through improved food safety or enhanced agricultural productivity because of the reduced prevalence of animal or plant pests and diseases.
- They are highly technical in nature and require access to scientific knowledge and technical expertise and experience in order to achieve compliance in an effective and efficient manner.
- Compliance with trade-related SPS measures often requires substantial investments

⁵ The notion of gender is distinct from ‘sex’ which refers to the biological characteristics of men and women (Panelli 2004).

across both the public and private sectors, whilst the significant economies of scale associated with these investments mean that compliance can have significant distributional consequences.

- Both the public and private sectors in exporting countries can face choices in how to comply with trade-related SPS measures, with the chosen pathway towards compliance significantly influencing the impact on trade and the performance of global value chains, and the welfare of those they employ.
- Compliance with trade-related SPS measures can induce significant changes to the organisation, governance and *modus operandi* of global value chains, such that the impacts can be complex, wide-ranging and, at times, unpredictable.

As will be seen below, these are all factors that need to be considered in assessing the impact of trade-related SPS measures on low and middle-income countries, including the degree to which these impacts are gendered.

Whilst little attention has been given to the potential gender issues associated with trade-based SPS measures, both in the academic and policy literatures,⁶ it is reasonable to expect that these issues are considerable.⁷ Indeed, Tran-Ngyen and Beviglia-Zampetti (2004) argue that SPS measures and other market-entry conditions and requirements are an urgent and pervasive problem for low and middle-country exporters, and especially under-resourced female exporters. As highlighted above, global value chains and the processes by which these respond to external forces in the context of trade, of which SPS measures are one, are highly gendered. Furthermore, it is recognised that laws and regulations in both the national and international spheres have a significant and often adverse impact on women (World Bank 2018).

This rest of this paper provides an initial examination of the gendered nature of trade-related SPS measures. In so doing, it explores three questions:

- To what extent are women adversely impacted by trade-related SPS measures and/or prevented from exploiting the potential benefits from compliance with these measures?
- How important are women in efforts to enhance trade-related SPS capacity in low and middle-income countries, and to what extent are their roles and circumstances considered in the design and implementation of SPS-related technical assistance?
- To what extent are gender issues considered in the global governance of trade-related SPS measures?

The first of these three questions is motivated by theoretical and empirical evidence of the gendered nature of global value chains (see for example Bamber and Staritz 2016; Fessehaie and Morris 2018). Thus, for example, exports of fresh fruit and vegetables from low and middle-income countries have induced a shift from fragmented value chains based on market-based relationships to highly coordinated and integrated supply chains (Dannenberg and Nduru 2013; Schumacher 2014). A growing body of literature shows how global value chains, and their evolution over time in response to opportunities for the export of high-value agri-food products, are gendered (Maertens et al. 2012). Regulations and standards, furthermore, are a key element of the environment in which these value chain operate, significantly influencing chain performance and impacting the welfare of individuals employed within those chains, including women (Kaplinsky and Morris 2017). The literature highlights how the gendered division of labour within global value

6 Notable exceptions include Carr and Ito (2010), Sengendo (2010) and Kareem (2017).

7 The one area where there has been some recognition of the importance of gender is the importance of women in the implementation of SPS-related technical assistance.

chains can limit the economic opportunities available to women (Fontana and Paciello 2010), and that they face greater difficulties than men in accessing the resources required for upgrading. In addition, women often inhabit precarious positions within global value chains, such that they are more adversely affected by shocks that impact how these chains are organised and/or operate. It is not unreasonable to expect, therefore, that the impact of trade-related SPS measures on global value chains, and on the women that are employed within them, will be significant. This issue is discussed further in Section 4.

National SPS authorities should consider not only the most effective and least trade-discriminatory ways in which to manage food safety and plant and animal health risks, but also how to minimise the potential detrimental impacts on women at home and internationally, and especially in developing countries. The means to do this is discussed in Section 5.

The fact that women play a key role in global value chains, and especially in the primary production of agri-food products, is well documented (Kabeer, 2012; Bamber and Staritz, 2016). By implication, therefore, it is reasonable to expect that women will

play a vital role in the upgrading of global value chains in response to trade-related SPS measures. The implication is that the impact of efforts to build the capacity of low and middle-income countries to comply with trade-related SPS measures will be dependent on the extent to which they take account of the roles, special needs, and circumstances of women within the impacted global value chains. This suggests that gender-sensitive SPS capacity-building is important not only to ensure that women are not adversely impacted by compliance with trade-related SPS measures, but also for the effectiveness and efficiency of capacity-building itself. This is the motivation for Question 2, which is explored further in Section 6.

Finally, institutions such as the WTO and the ISSOs play a key role in defining the rights and responsibilities of nation states with respect to the SPS measures they apply, and in ensuring that low and middle-income countries are not unduly impacted. To the extent that trade-related SPS measures have distinct and perhaps adverse impacts on women, it is important that gender is mainstreamed in the global governance of these measures. This issue is addressed by the third question that is discussed in Section 7.

4. THE GENDERED IMPACT OF SPS MEASURES

The empirical literature on the gendered impacts of trade-related SPS measures is extremely sparse. Whilst a number of case studies (such as those presented in Boxes 2 and 3 below) highlight the ways in which women are impacted by compliance with trade-related SPS measures, gender is not the primary focus of the underlying analysis. Furthermore, there is a paucity of quantitative studies of the gender impacts of compliance with trade-related SPS measures, in stark contrast to the burgeoning analysis of the trade and firm-level impacts of these measures (see for example Czubala et al. 2009; Crivelli and Gröschl 2012; Grant and Arita 2017; Kang and Ramizo 2017). One exception is Kareem (2017) who shows how compliance with EU SPS and TBT measures has contributed to gender inequality in agriculture.⁸

Luckily there is a not inconsiderable literature on private food safety standards that can provide useful indicators of the impact of compliance with trade related SPS measures; much of this focuses on the impacts on smallholder participation in value chains to high-value markets, especially for fresh produce. This literature sends a rather mixed picture, with some studies suggesting that smallholders have been excluded from global value chains because of the challenges of compliance with the standards of European supermarkets, whilst others provide evidence that smallholders have a comparative advantage in achieving compliance, especially for crops requiring care and attention (see for example Dolan and Humphrey 2000; Danielou and Ravry 2005; World Bank 2005). The limited studies that focus on the impact on women specifically, however, paint a more consistent picture of the exclusion of women from smallholder production (Eaton and Shepherd 2001; Dolan 2001; 2004; Kabeer

2012). Conversely, increasing opportunities for women in estate production and commercial food processing can bring benefits through greater and more secure employment (Maertens and Swinnen 2012).

There is also a relatively robust literature on the gendered nature of sustainability and social standards (see for example Kaplinsky and Morris 2017; Smith et al. 2018). For example, with respect to organic standards, there is evidence that women face challenges in achieving compliance, but that they derived substantial economic benefits when they manage to do so. A number of studies have examined the gender issues associated with organic certification of coffee in Uganda (see for example Bolwig 2012; Kasente 2012; Meemken et al. 2017a; Meemken et al. 2017b). These studies suggest that women struggle to achieve organic certification because of less access to information on the nature of organic standards and the changes in production needed to achieve compliance. For example, they tend to be excluded from both informal and formal mechanisms through which information is exchanged between (male) producers, and are less likely to participate in training sessions. At the same time, many of the operations needed within organic farming systems, for example manual weeding and pest scouting, are dominated by women. Whilst the workload of women tends to increase as a result, they have less control than men over the proceeds from organic coffee production.

On the basis of these prior studies, it is reasonable to expect that the impacts of trade-related SPS measures are indeed gendered, but that these impacts will vary in terms of both their nature and magnitude. In order to begin understanding when and how women are likely to be impacted by trade-related SPS

⁸ This econometric analysis estimates that a 10 percent increase in EU notifications to the WTO of SPS and TBT measures reduces the global relative employment of women in agriculture by 3.4 percent. Conversely, in certain regions, namely sub-Saharan Africa, East Asia, and the Pacific, EU SPS and TBT measures are found to increase the employment of women in agriculture.

measures, therefore, it is necessary to focus on the process through which global value chains work towards and achieve compliance with the SPS measures they face. As outlined in Table 1, this process involves a sequence of stages, each of which potentially requires actions by multiple actors and that are dependent on access to particular resources. In turn, this process drives changes in the structure and/or *modus operandi* of global value chains.

Kaplinsky and Morris (2017) contend that the key challenges faced by global value chains in complying with regulations and standards relate to the high costs that are typically associated with compliance and the need to access specialised and often scarce resources. Furthermore, they argue that the compliance process, as a result, frequently results in the exclusion of disadvantaged actors in global value chains, such as women. At the same time, however, compliance with trade-related SPS measures both induces and can offer opportunities for the upgrading of value chains in positive ways (Henson and Jaffee 2006). Critical here is to understand the routes through which this takes place, and the contextual and other factors that influence the extent to which women experience these constraints differently from men. Some of the critical pathways are summarised in Box 1.

That the costs of compliance with trade-related SPS measures often involve major upfront investments is well documented (see for example World Bank 2005; UNIDO 2005; Megapesca 2017). It is also recognised that the significant economies of scale and scope associated with the compliance process favours larger value chain actors (Henson et al. 2004; Aloui and Kenny 2005; World Bank 2005; Ponte

2012). Given that female-operated enterprises within global value chains tend to be smaller than those operated by men (Bamber and Staritz 2016; Kaplinsky and Morris 2017) this will tend to disadvantage women. Case studies of compliance with trade-related SPS measures (such as those presented in Boxes 2 and 3) highlight how small businesses struggle to absorb the costs associated with compliance. Sudden changes in SPS requirements are especially problematic. Small businesses, as a consequence, tend to comply in a reactive mode and are frequently engaged in a continuous process of “catch-up”. This is far from the proactive and strategic approach to compliance that can be the basis of significant commercial gains through market leadership and repositioning (Henson and Jaffee 2006).

Because of the technical nature of SPS measures, compliance generally requires that enterprises can comprehend at least basic elements of the rationale behind the measure and the practices that they are being required to adopt. Furthermore, enterprises must maintain records that demonstrate compliance on a day-to-day basis, and to pass these on to downstream actors within global value chains and/or to regulatory authorities. In this context, value chain actors lacking basic literacy and numeracy are placed at a significant disadvantage in the compliance process (Kaplinsky 2016; Kaplinsky and Morris 2017). It is well documented that in many low and middle-income countries, literacy and numeracy rates are significantly lower in women than men (Bamber and Staritz 2016). Thus, Fontana and Paciello (2010) show how women often lack the education and expertise required to comply with regulations and output standards.

Box 1: Summary of pathways through which women can be impacted by trade-related SPS measures

- Enterprises operated by women may face greater costs of compliance than those operated by men, for example because they tend to be smaller, and/or struggle to gain access to the finance necessary to fund these costs.
- Women may lack certain critical skills required for compliance, for example minimum levels of literacy and numeracy required for record-keeping.
- Women may struggle to access the resources that are required for compliance, including information, technical services, equipment, improved inputs, etc., because they are excluded from the networks through which these resources are distributed, they lack access to finance, etc.
- Compliance induces changes to the structure and/or *modus operandi* of global value chains in a manner that disadvantages or excludes enterprises operated by, or that predominantly employ, women.
- Trade-related SPS measures can create opportunities for livelihood enhancement amongst women, notably in cases where they have a comparative advantage within the compliance process.
- Enterprises operated by women may struggle to exploit opportunities for the proactive upgrading of the value chains through SPS measures, despite the fact that they offer scope for enhanced and less precarious livelihoods.

As outlined in Table 1, compliance with SPS measures requires access to technical, productive and financial resources. The fact that women face greater challenges than men in gaining access to these resources means that the process of compliance acts to disadvantage them. Thus, there is a growing literature showing how women struggle to access land, capital, and reliable infrastructure (Fontana and Paciello 2010). For example, evidence from Mozambique suggests that men are twice as likely as women to access extension services (Fontana 2011). The limited participation of women has been observed also in Cambodia and Vietnam (Fontana and Silberman 2012) and Honduras (Bamber and Fernandez-Stark 2013), amongst other countries. More generally, women have less access to training than men (Barrientos et al. 2001), despite the fact that this has been shown to be essential for upgrading, for example in the context of the horticulture sector (Fernandez-Stark et al. 2011). At the same time, there is evidence that

women are less successful at seeking out new information and markets than men (Barham and Chitemi 2009), predominantly because they are excluded from social networks that preclude their interaction with non-related men.

The process of compliance with trade-related SPS measures can induce significant changes to the structure and *modus operandi* of global value chains. First, value chains actors will make efforts to minimise the costs of compliance they face, and adjust their operations as well as the linkages they have with up- and down-stream actors in order to achieve compliance in the most effective and efficient manner (Henson and Jaffee 2006). Second, reflecting the economies of scale and scope associated with compliance (Kaplinsky and Morris 2017; Ponte 2012), trade-related SPS measures frequently bring about the consolidation of actors at key stages of the value chain. Furthermore, the need to possess critical skills and access the resources required for compliance can disadvantage smaller and

otherwise less advantaged businesses. Third, the often-considerable transaction costs associated with trade-related SPS measures induces integration between different levels of the value chain, often to the exclusion of smaller intermediaries (Henson and Humphrey 2010).

The two examples of compliance with EU hygiene requirements for fish and fishery products in South Asia provided in Boxes 2 and 3 illustrate the ways in which compliance with trade-related SPS measures has excluded women from global value chains. These cases provide stark examples of the adverse impacts on women, that can have profound implications for their livelihood and social position, and ultimately for their health and wellbeing (Bamber and Staritz 2016; Kaplinsky and Morris 2017). They reflect the fact that women are frequently employed in the most precarious activities within global value chains, and lack the skills and access to resources needed in

order to upgrade in the face of the compliance challenges posed by trade-related SPS measures.

These examples of the active exclusion of women from global value chains most probably represents the “tip of the iceberg” of the impact on women of compliance with trade-related SPS measures. Thus, Tran-Nguyen and Beviglia-Zampetti (2004) highlight how the upfront costs of compliance with SPS measures are often prohibitive for women and can prevent them from exploiting potentially lucrative opportunities to export high-value agri-food products. Indeed, the enormity of the challenge of compliance can mean that women are deterred from even making efforts to enter these value chains. Kaplinsky and Morris (2017) make the same observation with respect to compliance with regulations and standards more generally, including (perhaps ironically) those focused on sustainability and social issues.

Box 2: Compliance with EU hygiene requirements in Keralan shrimp export sector

In 1991, the European Union (EU) implemented harmonised requirements for hygiene in the capture, processing, transportation, and storage of fish and fishery products. Countries exporting fish and fishery products to the EU, such as shrimp, were required to ensure that facilities in their own country complied with these requirements. These included the implementation of HACCP-based controls along the value chain for fish and fishery products, and in many cases the upgrading of fishing vessels and fish processing and storage facilities. A number of countries struggled to meet these requirements, and indeed faced restrictions on their fish and fishery product exports as a result. Furthermore, the EU’s hygiene requirements often induced significant changes to the structure and *modus operandi* of export-oriented value chains, which had significant implications for local poor populations, and women in particular. The case of shrimp exports from the southern Indian state of Kerala provides one example.

Historically, the cleaning and deshelling of shrimp in the Keralan shrimp export value chain was undertaken by independent preprocessors. Processing facilities were typically little more than freezing plants that assembled, froze, and packaged shrimp in bulk prior to export. In 1997, there were 931 independent preprocessing facilities registered with the Government of India. These operations absorbed much of the risks associated with fluctuations in raw material prices, and carried the significant fixed and variable costs associated with preprocessing operations. At the same time, in-home peeling of shrimp on a piece-rate basis remained common, despite the long-term efforts of the Government of India to eradicate this process as part of efforts to enhance hygiene controls within the value chain.

Box 2: Continued

In 1997, as a result of the upgrading of hygiene controls within the shrimp value chain in response to the regulatory requirements of the EU, the Government of India prohibited the use of independent preprocessors by EU-approved exporters. The immediate impact was the closure of close to half of the independent pre-processing facilities. The remaining home-based peeling was eradicated completely from the supply chain for shrimp destined for the EU. Whilst the Government of India soon backtracked in the face of significant preprocessing under-capacity and implemented a system of inspection and licencing of independent operations, this did not prevent further rationalisation from taking place, as most EU-approved processing facilities made investments in integrated preprocessing operations.

The changes that took place in response to the EU's hygiene regulations had significant socio-economic impacts at the local level, and especially on women. Home-based peeling of shrimp had been undertaken almost entirely by women, many of whom were not permitted to work outside the home. The rate of employment of women in independent preprocessing facilities was also significant. This contrasts with upgraded shrimp processing facilities that integrated preprocessing into their operations that were staffed almost entirely by men. Faced with limited alternative employment opportunities, this resulted in a significant decline in the livelihoods of poor women in shrimp fishing communities along the coast of Kerala.

Source: Henson et al. (2004)

Perhaps as frequently as women being excluded entirely from global value chains by compliance with trade-related SPS measures, the associated processes of upgrading bring about changes in the position of women within those chains (Rossi 2013). These changes largely reflect the changes to the structure and/or *modus operandi* of value chains that are induced by compliance. For example, Maertens and Swinnen (2015) document how food safety and other standards have caused a shift from smallholder contract production to vertically-integrated estate production. In turn, women's role within the value chain has shifted from being owner-managers of small businesses to employed labourers in large-scale commercial enterprises. Maertens and Swinnen (2015) find evidence that these changes have actually been beneficial to women in terms of their income and work conditions.

The dominant discourse on the upgrading of global value chains (see for example

Bamber and Staritz 2016), and specifically in the context of compliance with regulations and standards (see for example Kaplinsky and Morris 2017), presents a rather negative picture with respect to the impact on women. There are documented examples, however, where trade-related SPS measures have presented significant opportunities for women to enhance and/or diversify their livelihoods, and where women have been successful in navigating the process of compliance. Box 4 presents the example of sesame seed and shea nut exports from Nigeria. Redden (2017) provides further examples; exports of mango from Burkina Faso and Watermelon from Tonga. In both cases, small-scale producers and processors were required to upgrade food safety controls, including the implementation of hazard analysis and critical control point (HACCP) and/or the installation of sanitary processing and handling facilities. Success in meeting the SPS requirements of target markets brought significant income-earning opportunities, including for many women.

Box 3: Compliance with EU hygiene requirements in Bangladesh shrimp export sector

The implementation of harmonised hygiene requirements for fish and fishery products by the EU, as described in Box 2, have also had significant impacts on the export-oriented value chain for shrimp (including prawns) in Bangladesh, although in quite different ways. Again, however, there were significant and detrimental impacts on poor local women.

In contrast to Kerala, where most shrimp for export were captured from the wild, most shrimp exported from Bangladesh were cultivated in aquaculture operations. Many coastal communities of Bangladesh had come to depend on fish farming as a source of employment and income, often with few alternative livelihood opportunities apart from farming. Efforts to comply with the EU's hygiene requirements for fish and fishery products induced profound changes in the structure of shrimp production as exporters sought to command greater control over hygiene along the value chain.

Historically, shrimp had been cultivated in two distinct production systems in Bangladesh. Freshwater prawn (*Golda*) production was undertaken on a small scale and involved the cultivation of wild fry. *Golda* production involved large numbers of poor producers, many of whom were landless. Furthermore, women were actively involved in the management of ponds, wild capture of fry, etc. In contrast, the production of brackish-water prawns (*Bagda*) was generally undertaken in larger operations and was integrated with the cultivation of fry rather than wild capture. Most of these operations employed wage labour, which was mainly men.

The upgrading of hygiene controls along the shrimp value chain induced the restructuring of the shrimp value chain in Bangladesh. Processing facilities had generally procured raw material from producers through intermediaries, most notably village traders (*Farias*) that mediated between producers and the village depots where shrimp were consolidated prior to collection by a processing facility. In order to comply with the EU's hygiene requirements, the Government of Bangladesh banned *Farias* from the value chain and required the upgrading of the facilities of village depots. There was significant rationalisation of village depots as a result. At the same time, shrimp producers were required to implement enhanced hygiene controls.

These changes induced, in turn, changes to shrimp production. Small-scale producers had been reliant on the cash advances made by *Farias* and also the amalgamation function that these agents performed. The restructuring of the value chain, therefore, induced the progressive consolidation of production in larger-scale operations and a shift towards *Bagda* production.

Whilst efforts were made to upgrade the hygiene controls of small-scale shrimp producers, including through a Standards and Trade Development Facility (STDF)-funded project lead by FAO, a significant proportion of small-scale producers abandoned shrimp cultivation and returned to rice farming. Furthermore, there was a marked decline in the employment of women in the value chain, both in the capture of wild fry and in shrimp cultivation. Women in these communities had few alternative livelihood opportunities except within agriculture.

Source: FAO (2016); Ito (2004; 2007); Haque (2003); Redden (2017).

Box 4: Promoting food safety in Nigeria's sesame seed and shea nut export sector

Whilst Nigeria is one of the world's largest producers of sesame seed and shea nuts, efforts to promote exports of these products to high-value markets in the EU and US have been hampered by poor food safety practices. Most notably, the use of inappropriate post-harvest handling methods has contributed to widescale contamination with aflatoxins. These problems have hampered efforts to enhance the livelihood of communities that are engaged in the production and/or processing of sesame seeds and shea nuts. Importantly, the processing of shea nuts is dominated by women in these communities, who are organised into self-governing local cooperatives.

Through a public-private partnership, the Nigeria Export Promotion Council (NEPC) and ITC supported the implementation of good practices in the production and control of sesame seeds and shea nuts. Partners were drawn from across government and industry, and included local agencies and trade associations such as the Sesame Seed Association and Shea Nut Producers Association. Interventions included awareness-raising and information-sharing through the distribution of publicity materials and public-private dialogues. A series of capacity-building workshops on safety and quality connected stakeholders along the production and supply chain, and promoted trade opportunities.

Eight sites with modern processing equipment for cleaning sesame seeds and processing shea butter were established nationwide. A cost-sharing partnership between the private sector, cooperatives, and NEPC was established to manage these sites. A training programme for extension officers, traders, exporters, and standards enforcement officers was rolled out on Good Manufacturing Practices (GMP) and HACCP to improve product safety and quality. As a result, over 1,000 women processors were trained. Manuals on safety and quality, codes of good practice, and national standards were updated, and a traceability system was set up for both sesame seeds and shea nut products. Finally, efforts were made to minimise the risks associated with aflatoxin contamination along the sesame seed and shea nut value chains.

As a result of the project, the Ifedawapo Shea Butter Cooperative in Saki, which consists of 120 small-scale buyers and processors, had product samples certified by the National Agency for Food and Drug Administration and Control and by internationally-accredited laboratories. Within two years of the project, the Cooperative had sold over 200 tonnes to major Nigerian and US cosmetics companies, and had secured additional orders for a further 500 tonnes. The development of shea butter processing sites is now being replicated nationwide. More than four new processing facilities have been operationalized, bringing new opportunities for women and young people.

Source: STDF (2016)

The documented examples of where women have benefitted from compliance with trade-related SPS measures provide important insights into success factors (see for example STDF 2016). A characteristic common of all of these examples is the provision of technical assistance, generally funded by bilateral or multilateral donors but usually implemented in collaboration with local

partners. The role of technical assistance, and the degree to which this takes account of the roles, needs, and position of women, is reviewed in Section 5. Most cases of success in complying with SPS measures, furthermore, involve collection action amongst small producers, processors or traders. Often this is facilitated through cooperatives and/or women's groups.

The fact that women have been successful in complying with trade-related SPS measures also reflects that, in some instances, they possess a comparative advantage within global value chains that is brought about and/or enhanced by the process of compliance. In many cases, this reflects the need for manual tasks that require a degree of dexterity, and that do not need high levels of literacy or numeracy. In the Kenyan fresh produce sector, for example, women and children play a key role in scouting for pests, and harvesting and handling produce in the context of exacting food safety requirements, predominantly driven by the private standards of European supermarkets (Jaffee 2003).

The magnitude and ways in which trade-related SPS measures are likely to impact women will depend on a host of factors; there will be measures where it is reasonable to expect that there is little or no impact, and those where the impacts are likely to be negative and severe. Whilst SPS measures need to be assessed on an in-depth and a case-by-case basis in order to identify the associated gender impacts, it is possible to define a series of factors that highlight or “raise warning flags”

where these impacts might be significant. These factors include: 1) significant volume of exports; 2) value chains that are SPS-sensitive and where compliance is most likely to cause disruption of the value chain; 3) prevailing level of SPS capacity; 4) value chains in which poor women are employed with significant implications for livelihoods; 5) women occupy vulnerable positions within the value chain; and 6) women lack critical skills and/or face constraints accessing the resources required for compliance. These factors, and plausible indicators for each, are outlined in Table 2.

The compilation of indicative factors in Table 2 does not claim to be comprehensive, and the magnitude and nature of any gender impacts will often be specific to a particular SPS measure and the context in which compliance takes place. The use of indicators such as these, therefore, is not meant to substitute for a more in-depth assessment of the potential gender impacts of specific trade-related SPS measures. Indeed, a key recommendation of this paper is for the design and implementation of a rapid assessment tool that can be used to highlight gender issues on a routine basis (see Section 8).

Table 2: Indicators of trade-related SPS measures where there is potential for Gender-based analysis

Factor	Indicator(s)
Scale	<ul style="list-style-type: none"> Value of exports of the value chain in the last three years
Degree of SPS sensitivity of the value chain	<ul style="list-style-type: none"> Number of SPS measures to which the value chain is subject Proportion of exports to high-value markets Number of rejections of product consignments in major high-value markets in the last three years
Degree to which compliance with SPS measures disrupts global value chains	<ul style="list-style-type: none"> Proportion of enterprises at various levels of the value chain that are micro or small in size Proportion of enterprises at various levels of the value chain that are informal Scale of compliance costs associated with the measure
Prevailing level of SPS capacity	<ul style="list-style-type: none"> Number of firms certified to international-recognised standards such as ISO9000, ISO22000, GlobalGAP, etc. Assessment of SPS capacity using standardised and internationally-recognised frameworks such as the Phytosanitary Capacity Evaluation (PCE) tool of the IPPC and the Performance of Veterinary Services (PVS) tool of the OIE.
Role of poor women in value chain	<ul style="list-style-type: none"> Participation of the poor at different stages in the value chain Participation of women at different stages in the value chain

Table 2: *Continued*

Factor	Indicator(s)
Job status of women	<ul style="list-style-type: none"> • Women's share of supervisory and managerial positions at various stages in the value chain
Role of value chain in the livelihoods of women	<ul style="list-style-type: none"> • Proportion of the cash income accounted for by employment in the value chain at various stages in the value chain • Proportion of the time of women spent engaged in work within the value chain at various stages of the value chain
Degree to which women are engaged in vulnerable employment	<ul style="list-style-type: none"> • Women's share of informal, contract and/or seasonal employment at various stages in the value chain • Access of women to alternative sources of cash income • Degree to which women employed at various stages of the value chain have access to social security • Degree to which women are able and willing to engage in paid employment beyond the home • Degree to which women are employed in informal sector and/or micro and small enterprises within the value chain
Level of education	<ul style="list-style-type: none"> • Proportion of women at various levels of the value chain who are fully literate • Proportion of women at various levels of the value chain who have received vocational/technical education/training
Access to training	<ul style="list-style-type: none"> • Rate of participation of women in formal training programmes at various levels of the value • Rate of participation of women in "on the job" training at various levels of the value chain • Level of participation of women in extension services
Access to finance	<ul style="list-style-type: none"> • Women's share of bank/savings accounts • Willingness of informal and formal lenders to provide loans to women
Access to information	<ul style="list-style-type: none"> • Women's participation in informal and/or formal business networks • Proportion of women at various levels of the value chain who are fully literate • Role of women in leadership roles in informal and/or formal business networks • Degree to which information is disseminated through means that are accessible to women

The foregoing discussion has highlighted how there are potentially significant and also varied ways in which trade-related SPS measures can impact women. Also, whilst the over-riding concern is that the process of compliance can negatively impact women, SPS measures can also create opportunities for the upgrading of global value chains that bring benefits to them. Most obviously, compliance with SPS measures can influence the access of women to income-earning opportunities through the operation of owned-businesses

or employment, and the position of women within global value chains in terms of levels of remuneration and precariousness. In these ways, SPS measures can act to empower or disempower women, and have impacts on the burden they face on a day-to-day basis, their social position and overall welfare (Bamber and Staritz 2016). For these reasons, trade-related SPS measures are highly relevant to broader-based efforts to achieve the SDGs (Fessehaie and Morris 2018), and most notably SDG 5 that relates to gender equality.

5. CONSIDERING GENDER IN THE PROMULGATION OF NATIONAL SPS MEASURES

Given that the impacts of trade-related SPS measures on developing countries can be highly gendered, there is a need to recognise the implications for women when new or revised measures are being promulgated. In order to do so, national SPS authorities should consider not only the most effective and least trade-discriminatory ways in which to manage food safety and plant and animal health risks, but also how to minimise the potentially detrimental impacts on women at home and internationally, and especially in developing countries.

Operationalising a “gender-lens” in the promulgation of national trade-related SPS measures has significant implications for national SPS authorities and their internal processes. First, it requires that gender specialists work alongside technical experts in the promulgation of SPS measures. Second, there is a need for new or revised measures to be screened for potential adverse gender impacts, for example on the basis of the criteria identified in Table 2. It is not necessarily the case that all SPS measures have significant gendered impacts; what is necessary is to identify the measures that do. Amongst the recommendations in Section 7, it is proposed that a simple screening tool be defined and validated for this purpose.

Given that the gendered impacts of trade-related SPS measures vary on a case-by-case basis, and also between local circumstances in developing countries, where a new or revised measure is flagged as being “gender-sensitive” there is a need for a more in-depth gender analysis. Having undertaken this analysis, the next stage is to consider the scope for changes to the measure that, whilst not appreciably diluting its efficacy, could avoid the potentially most adverse effects on women. A good starting point here is the nature of the compliance process associated with the measures: what actions need to be taken and by whom, and what

resources must these actors be able to access? There is much to be gained from the sharing of experiences amongst national SPS authorities in undertaking this process, and a role for international institutions such as the SPS Committee and Standards and Trade Development Facility (STDF) (see below) in facilitating and coordinating the dialogue between WTO member states.

One potential way in which to reduce the adverse impacts on women of trade-related SPS measures is through the harmonisation and/or equivalence of national SPS measures. Harmonisation can act to reduce the number of SPS measures with which businesses in developing countries have to comply. UNIDO (2015) claims that this can reduce the competitive costs for small businesses, in particular those operated by women. Furthermore, harmonisation can enhance the benefits of compliance to the extent that this facilitates access to multiple country markets. This can be achieved by promoting the application of national SPS measures that are based on international standards, guidelines and recommendations. To the extent that equivalence means that differing SPS measures that provide the same level of SPS protection are accepted in different markets, equivalence can lower the costs of compliance in much the same way that harmonisation does. Given that women endure an inordinate burden due to these costs, they stand to benefit most from these efforts to reduce them.

Aside from changes to the technical requirements of new or revised SPS measures, the potential gender impacts can be reduced or even defrayed through the manner in which their introduction is administered. Critical here is to maximise the time that businesses in developing countries have to comply. The foregoing discussion in Sections 3 and 4 shows how the costs of compliance with SPS measures can be amplified by the need to comply within a short time period, and that short compliance

periods inhibits the possibility for compliance in a more strategically advantageous manner. With respect to national SPS authorities this implies the need for plans for new or revised SPS measures to be made public as early as possible, for compliance periods

to be maximised, and for information on these requirements and their implications for the operation of global value chains to be disseminated actively, including through information channels that are available to small and/or female-operated businesses.

6. THE IMPORTANCE OF GENDER TO SPS CAPACITY-BUILDING

In order to address the challenges faced in complying with trade-related SPS measures, significant investments have been made to upgrade food safety and plant and animal health capacity in low and middle-income countries. Technical assistance by bilateral and multilateral donors has played a key role in these efforts, both as part of longer-term projects and programs aimed at enhancing structural SPS capacity and in the context of immediate challenges complying with specific SPS measures. Indeed, the SPS Agreement provides a mechanism through which low and middle-income countries can request technical assistance, and encourages WTO members to aid developing countries where compliance requires substantial investment. Over time, many lessons have been learned regarding the impacts of SPS-related technical assistance and efforts made to promote “good practice”, perhaps most notably by the Standards and Trade Development Facility (STDF).

As outlined above, women play a key role in the global value chains for many agri-food products and face particular challenges in the context of compliance with trade-related SPS measures. Parts of global value chains that are critical to compliance with SPS measures are often dominated by women, such that success in achieving compliance is dependent on addressing the barriers they face.⁹ The upgrading of value chains driven by compliance with SPS measures, furthermore, can act to exclude women and/or prevent them from participating in compliance processes that can bring potentially lucrative economic opportunities. For these reasons, it is critical that SPS capacity-building efforts are designed and implemented in a manner that is gender-sensitive.

First, the specific constraints faced by women in complying with trade-related SPS measures must be given priority in capacity-building programs and projects. Direct support might be given to the compliance efforts of women, for example through the dissemination of information, provision of training, and financing.¹⁰ Here, using cellphone and/or internet-based platforms for information relating to compliance, for example, could be an effective and low-cost strategy (Suominen 2018). The upgrading of capacity more generally, however, can also address the constraints faced by women if this enhances the availability and/or reduces the costs of key compliance resources. For example, the establishment of local inspection and certification capacity as a substitute for the use of foreign providers acts to reduce the cost of these services for all, but benefits women more to the extent that they face greater constraints in accessing and/or financing the inspection and/or certification required to demonstrate compliance.

Second, the focus of capacity-building should be on the longer-term and systemic development of SPS capacity across the public and private sectors. This contrasts with much donor-funded capacity-building which is directed at compliance with specific SPS requirements for market access. The aim here is to enhance the capacity of small business, which as was outlined above are disproportionately operated by women, to comply with emerging SPS requirements in a strategic manner and alongside efforts more generally to upgrade within global value chains. In this way, furthermore, costs of compliance can be reduced and/or integrated into longer-term investments that can be easier and less costly to finance.

9 For example, Fessehaie and Morris (2018) highlight the role of women in tea plucking and fish processing in South Asia, and emphasise the importance that support to value chain upgrading prioritises women’s technical and financial capacity.

10 Of course, social-cultural and/or legal constraints faced by women in accessing critical resources (for example land) might be beyond the scope of SPS capacity-building and can still act to impede their efforts to comply with trade-related SPS measures.

Third, SPS capacity-building projects and programmes must be delivered in a manner that facilitates the participation of women and minimizes the burden that capacity-building effort places upon them. For example, the provision of extension advice by men in communities of female farmers, but where women are prohibited from interaction with men outside of their family, acts to exclude them. Furthermore, holding information dissemination and training events around times that women are engaged in meal preparation and/or childcare may exclude their participation, or impose an extra burden at a time of the day when they are already fully employed. Conversely, there are ways in which extension can be provided that facilitates the inclusion of women, for example train-the-trainer programmes for female producers, processors and/or traders, and NGO-led training of women's groups and cooperatives.

Whilst many donors recognise the importance of gender and have made concrete efforts to make their programming gender-sensitive, for the example the Enhanced Integrated Framework (EiF) and World Bank, SPS-related capacity-building remains largely technical in nature. Of course, it is possible to find instances of SPS-related capacity-building that has a clear gender focus (see for example Box 5). Projects of this type, however, remain the exception rather than the rule. Thus, most SPS-related capacity-building remains focused on the task of achieving compliance with specific trade-related SPS requirements in the most technically-effective and economically-efficient manner.¹¹ Whilst some projects do have a focus on the poor, and in so doing likely benefit women, most do not mainstream gender in a manner that ensures (and indeed prioritises) the roles, challenges faced, and impacts on women.

Box 5: Implementation of good agricultural practices in Malian mango sector

As part of the Enhanced Integrated Framework (EiF), support was provided to the Malian mango sector with the objective of addressing the supply-side constraints faced by the sector and enhancing its export competitiveness. The EiF supported mango producers and exporters 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. There is significant involvement of women in mango production in the Yanfolila region, where the project focused.

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. The cooperative has approximately 100 members at the time of the intervention. The Yanfolila fruit processing unit (ULTRAFRUY) was focused on empowering these women by adding value to local fruits. With EIF support, ULTRAFRUY achieved 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, USA, Gulf countries and North Africa. On the local market, the mango jam is sold to hotels and supermarkets. Through the EiF, 465 women in Yanfolila have been able to earn higher wages through mango production and jam-making.

Source: *Taupiac (2016)*

¹¹ This observation is based on a non-systematic scan of reports on SPS-related technical assistance provided to the SPS Committee, websites of multilateral agencies involved in the provision of SPS-related technical assistance (for example, FAO, UNIDO, ITC, etc.). A more systematic review is needed to corroborate this conclusion.

One provider of SPS-related technical assistance that has begun to recognise the importance of gender, and that has made some efforts to consider gender within its activities, is the STDF. Thus, the STDF's annual report of 2017 states (STDF 2017):

The Buenos Aires Declaration on Women and Trade, endorsed by 117 WTO members and observers at the WTO Ministerial Conference in 2017, provides a framework to increase the participation of women in trade, by removing barriers and fostering women's economic empowerment. The STDF is keen that its work and SPS capacity building projects generate more benefits for women in trade. Looking ahead, by developing linkages with gender-focused initiatives and being part of this global dialogue, STDF will be able to make sure that trade-related SPS capacity building assistance also focuses and impacts on women.

A recent STDF briefing note (STDF 2016) outlines examples of the importance of women to SPS capacity-building. A meta-analysis of evaluations of STDF projects completed in

or before 2015 (Andersson 2018), however, questions the extent to which STDF projects have mainstreamed gender in practice. Thus, amongst the recommendations of this analysis is the need for more systematic and focused attention to gender in the design and implementation of projects. Furthermore, it is recommended that the STDF should deepen both its analysis and dissemination of lessons-learned and examples of good practice from projects funded by the STDF and other donors, with respect to gender.¹²

Efforts have also been made to mainstream gender by organisations engaged in the provision of trade-related technical assistance more generally, including when their work pertains to the SPS area. One example is UNIDO, which has published a detailed guide to gender mainstreaming in trade-related technical capacity-building (UNIDO 2015). Whilst much of the focus of UNIDO's attention to date has been on the extent to which women are employed within quality infrastructure (see for example UNIDO 2016), the guide it has produced provides useful guidance for gender mainstreaming in SPS-related capacity-building.

12 At the same time, the analysis recognises that the rules and procedures of the STDF have evolved over time, including with respect to gender issues, whilst admitting that it was too early to say whether these changes had been successful.

7. ROLE OF GENDER IN THE GLOBAL GOVERNANCE OF TRADE-RELATED SPS MEASURES

The foregoing discussion has focused on the gendered nature of compliance with trade-related SPS measures and related capacity-building efforts. It highlights the critical gender issues needing to be addressed, and outlines how gender mainstreaming remains the exception rather than the norm in this arena. Of course, the remaining (and perhaps most pertinent) question is why gender issues have not been taken more seriously? This puts the “spot light” in turn, on the institutions charged with the administration of trade-related SPS measures at the global level, namely the WTO and the ISSOs.¹³

7.1 World Trade Organization

As recognised above, the SPS Agreement is central to the international governance of SPS measures. Not only does the Agreement lay down the rights and responsibilities of WTO member states with respect to the application of SPS measures in the context of trade, but it provides a formal mechanism through which member states can provide information, raise concerns and air grievances regarding the SPS measures applied by other members. Thus, over the period 1995 to 2017, a total of 434 specific trade-related SPS measures were raised by WTO member states.¹⁴

The forum through which WTO member states engage face-to-face on trade-related SPS issues is the SPS Committee. This committee meets three times annually in Geneva. Delegates to the SPS Committee represent the interests of their country and address the issues and concerns raised by other WTO members.

The proceedings of the SPS Committee focus largely on technical aspects of, and the

scientific justification for, the SPS measures applied by WTO member states and/or their trade impacts. The SPS Committee is also used as a forum for the discussion of wider issues associated with SPS measures, for example the growing prevalence and impacts of private standards, and for reporting on the SPS-related activities of multilateral organisations, amongst other things. Certainly, the socio-economic impacts of trade-related SPS measures are referenced by members when raising concerns about the measures applied by other countries, although these tend not to be the primary focus of the concerns that are raised. Furthermore, gender is almost never raised as an issue.

Over the period March 2010 to March 2018 the SPS Committee met a total of 25 times. The minutes of these meetings, whilst not providing a comprehensive record of the proceedings, do provide a good sense of the issues that were raised and discussed. The words “gender” or “women” occur a total of four times in the minutes of these meetings. Two of these four occurrences relate to the nature of SPS measures being applied by a WTO member state, namely, French labelling provisions for BPA in food contact materials out of concern for the potential risks to pregnant women and young children, and Japanese maximum residue levels (MRLs) for pesticide that take account of the likely dietary intake of both men and women. The two further references are part of reports on SPS-related technical assistance, namely the need to specifically focus on women (by the STDF) and the fact that technical assistance projects had benefited women (by the International Trade Centre (ITC)).

¹³ Whilst national institutions responsible for the promulgation of trade-related SPS measures have a role to play in recognizing and prompting the importance of gender issues, arguably leadership for this needs to be provided at the international level.

¹⁴ G/SPS/GEN/204/Rev.18.

A further indication of the limited extent to which gender issues are considered by the SPS Committee is provided by the inventory of specific trade concerns raised by WTO member states that is maintained by the SPS Secretariat.¹⁵ This inventory provides a summary of the nature of the respective SPS measure and the concern raised. Across the entire inventory, the words “gender” and “women” occur once; related again to French labelling requirements for BPAs in food contact materials.

The functioning of the SPS Committee, of course, very much reflects the nature of the SPS Agreement, and the rights and responsibilities that it enacts on WTO member states. The agreement itself makes no mention of the socio-economic impacts of trade-related SPS measures, including the impacts on women and even the implications for poverty.¹⁶ Whilst the SPS Agreement recognises that low and middle-income countries can face challenges in complying with trade-related SPS measures, and furthermore in complying with their responsibilities under the Agreement, these concerns mainly relate to weaknesses in the SPS capacity of these countries. More generally, whilst Article XX of the GATT enables member states to take measures in pursuit of public policy concerns, even where these may violate their WTO obligations, no specific mention is made of social or economic considerations, including gender Montour 2014.¹⁷

Reflecting the routine business of the SPS Committee, the responsibilities and expertise of delegates largely lie with technical aspects of food safety, plant health or animal health, and/or trade. In the case of larger WTO member states, the delegation can consist of multiple members. Rarely, however, do delegations include individuals with expertise and/or responsibilities related to the socio-

economic impacts of trade-related SPS measures, and most notably gender. This is a potential weakness of the Committee at the current time, in terms of the resources at its disposal for in-depth discussions of the often complex gender issues associated with trade-related SPS measures.

Looking to the future, the SPS Committee could and should be the forum in which WTO member states raise and discuss the gender issues associated with trade-related SPS measures. Furthermore, it can be instrumental in promoting gender mainstreaming in the promulgation of national SPS measures, and in the provision of SPS-related technical assistance. Achieving such a radical shift in the proceedings of the SPS Committee, however, will require sustained leadership by the most influential WTO member states. This can include consistently raising gender issues on a case-by-case basis, applying concerted pressure for a regular gender agenda item, and including gender specialists in their national delegations.

7.2 International Standards-Setting Organisations

The SPS Agreement promotes the harmonisation of trade-related SPS measures amongst WTO member states through the application of international standards. Thus, the SPS Agreement encourages countries to base their national SPS measures on the international standards, guidelines, and recommendations of the Codex Alimentarius Commission (CAC), International Plant Protection Convention (IPPC), and World Organisation for Animal Health (OIE), where these exist. Whilst countries are permitted to apply measures that are not based on international standards, in such cases they must provide scientific justification for these measures. In effect, national SPS measures that are based on international standards are,

15 See the various revisions to G/SPS/GEN/204.

16 Note that the impacts of poverty are seen disproportionately amongst women (for a review see Gornick and Boeri 2016).

17 Under Article XX, the justification for a measure taken by a member state must be specifically listed in Article XX.

de facto, considered to comply with the SPS Agreement, and are unlikely to be challenged through the WTO.

As a result of the SPS Agreement, therefore, the CAC, IPPC, and OIE have come to play a key role in the global governance of trade-related SPS measures. To the extent that the impacts of trade-related SPS measures are gendered, therefore, the work of these organisations is critical. More specifically, the extent to which these organisations give due consideration to gender when promulgating new or revised international standards, guidelines, and recommendations, is an open question.

The CAC is an intergovernmental body responsible for establishing international standards, guidelines, and recommendations for food safety and quality. A series of specialised technical committees is responsible for drafting new or revised international standards that are then put forward for adoption by the CAC. Within the CAC, each member has one vote, although most decisions are made on the basis of consensus. A number of sectoral, professional, consumer, and other organizations are observers to the CAC, but do not have a vote. These organisations can raise issues within the CAC, although they are subordinate to the official delegations of member states.

International standards and guidelines for plant health are established by the IPPC. The governing body of the IPPC, which is attended by official representatives of all contracting parties to the convention, is the Commission of Phytosanitary Measures (CPM). The CPM meets annually at FAO headquarters in Rome; it is at this meeting that IPPC standards and guidelines are adopted.

The World Organisation for Animal Health (OIE) is the intergovernmental body responsible for establishing international standards and recommendations for animal health. A series of specialist technical commissions is responsible for drafting new or revised standards that are then ratified by the OIE General Assembly. The General Assembly meets annually and consists

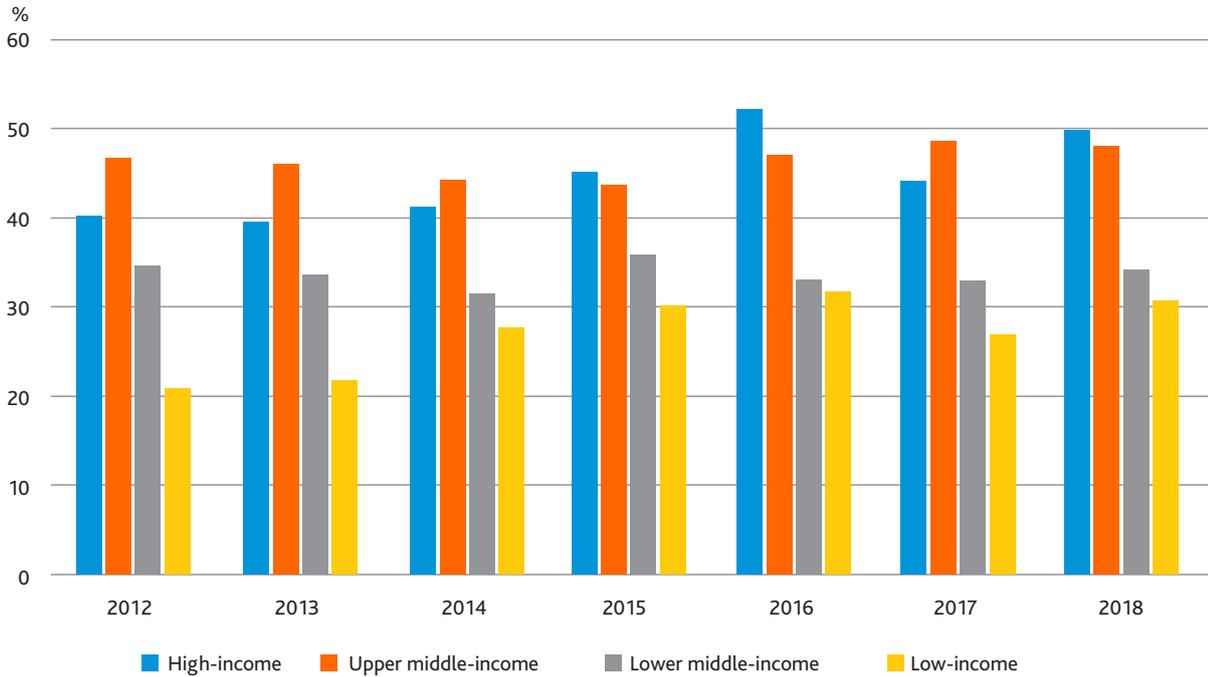
of official delegates of OIE member countries. Most of these official delegates are the chief veterinarian in their respective country.

Given the critical role played by the ISSOs in the global governance of trade-related SPS measures it is worrying that gender issues appear to play only a minimal role in the day-to-day operations of these organisations, and thus in the promulgation of international standards, guidelines, and recommendations. On the one hand, women are significantly under-represented in national delegations to meetings of the ISSOs. On the other, gender issues are rarely discussed in the process of approving new or revised international standards and other measures.

Taking the CAC as an example, women represented the minority of official delegates to the annual meeting of the Commission over the period 2012 to 2018 (Figure 2). Women are particularly under-represented in the delegations of low and lower middle-income countries, accounting for less than 35 per cent of delegates throughout the period 2012 to 2018. This contrasts to high and upper middle-income countries for which there is now almost parity between men and women in the gender composition of national delegations.

Without directly observing the proceedings of the various committees of the CAC, IPPC, and OIE it is difficult to judge the extent to which gender issues are considered in the drafting and adoption of international standards, guidelines, and recommendations. A search of the official record of meetings of the CAC, CPM, and General Assembly of the OIE, however, suggests that gender issues are rarely discussed. Thus, the words “gender” and “women” are recorded not even once in the reports of meetings of the CAC and CPM over the period 2010 to 2018. There is reference to “women” a total of eight times in the reports of meetings of the OIE’s General Assembly over the same period. In almost all cases the references to “women” or “gender” refers to presentations by donors (such as FAO, World Bank, and the Bill and Melinda Gates Foundation) in recognising the importance

Figure 2: Proportion of female delegates to Codex Alimentarius Commission by country income group, 2012-2018



Source: author

of women within the global livestock sector. Whilst this is an important first step, there is no record of discussion of gender issues with respect to the adoption of specific OIE standards or recommendations.

The minimal consideration of gender in the proceedings of the ISSOs is reflected in the lack of gender specialists amongst delegates to meetings of the CAC, CPM, and General Assembly of the OIE. Again, taking the CAC as an example, in only four meetings of the Commission over the period 2010 to 2018 was there even a single delegate from a government ministry or department with explicit responsibility for women's issues. In meetings where this was the case, delegates from such ministries or departments numbered only one or two.

Whilst the CAC, IPPC, and OIE will remain technical entities that are focused mainly on scientific and technical aspects of the risks to food safety and plant and animal health, there are compelling reasons for gender to be mainstreamed in their day-to-day work. It is logical for trade-related SPS measures, and in particular international standards, guidelines, and recommendations to be more gender-sensitive. That is, such an approach seems superior than focusing efforts almost entirely on alleviating the detrimental impacts on women once SPS measures have been implemented. As with the SPS Committee, it will take leadership from influential members of the ISSOs to ensure that gender issues make it onto the agenda.¹⁸ It will also require that gender specialists accompany food safety, plant health or animal health scientists on member delegations.¹⁹

¹⁸ In the case of the CAC, non-governmental organisations that are observers can also play a role in raising gender issues.

¹⁹ In only four meetings of the CAC over the period 2010 to 2018 was there even a single delegate from a government ministry or department with explicit responsibility for women's issues. In meetings where this was the case, delegates from such ministries or departments numbered only one or two.

8. POLICY IMPLICATIONS AND RECOMMENDATIONS

This report has demonstrated that there are significant gender issues associated with trade-related SPS measures. Furthermore, these measures can have potentially detrimental impacts on women in low and middle-income countries. Whilst some efforts have been made to address gender issues in the design and implementation of SPS capacity-building, this remains the exception rather than the rule. There has also been limited engagement with gender concerns associated with trade-related SPS measures amongst national SPS bodies and the institutions charged with the global governance of these measures, notably the WTO and ISSOs. Overall, there is a compelling case for immediate and decisive action for gender mainstreaming across the SPS arena.

It is with respect to SPS capacity-building that it is perhaps easiest to define practical steps towards the greater recognition and consideration of gender, towards an ultimate vision of gender mainstreaming. In turn, these initiatives will mean that trade-related SPS capacity-building is better aligned with broader efforts to achieve the SDGs, and especially SDG 5.

As a starting point, a *comprehensive review* should be undertaken of the ways in which the SPS capacity-building projects and programmes of bilateral and multilateral donors have integrated gender in their design and implementation.²⁰ Furthermore, *new and innovative approaches to the gender-mainstreaming of SPS capacity-building* should be explored. In so doing, the focus should be on identifying “*best practice*” in gender mainstreaming in the context of alternative approaches to SPS capacity-building

and efforts to build particular elements of capacity in specific country contexts.²¹ One organisation that is well-positioned to play a leadership role here is the STDF, especially given the efforts it has made itself to integrate gender into its own activities (see above).²² Thus, for example, the STDF could support SPS capacity-building projects that mainstream gender in novel ways and develop guidelines for donors on the basis of evaluations of these projects.

The STDF, furthermore, has supported the development and application of a structured and transparent approach to the prioritisation of SPS capacity-building in the form of the P-IMA framework Henson 2016. Whilst this framework incorporates decision criteria that focus on the socio-economic impacts of trade-related SPS measures, to date these criteria have not included gender. This is an easy adaptation to the P-IMA framework that should be implemented and promoted by the STDF, such that the *gender-based prioritisation of SPS capacity-building* becomes the norm.

The analysis presented above highlights the importance of gender in the promulgation of national trade-related SPS measures. Such an approach encourages efforts which avoid the most deleterious impacts on women of new or revised measures. Achieving this would require that national SPS institutions identify those measures for which gender issues are likely to be most pronounced, and then subjects these measures to an in-depth gender analysis. To achieve this, a *rapid gender assessment tool* is needed that could be employed by non-gender specialists.²³ This would employ indicators, such as those presented in Table 2, that will “flag”

20 This review could extend to capacity-building relating to quality infrastructure more generally.

21 For example, countries at different stages of economic development, nascent versus established export sectors, etc.

22 Other organisations that have made efforts to integrate gender into SPS-related capacity-building include UNIDO, EIF (which funds a number of projects that focus on gender and standards) and the ITC (through its SheTrades project).

23 A number of SPS assessment frameworks have been developed including the Phytosanitary Capacity Evaluation (PCE) tool of the IPPC, Performance of Veterinary Services (PVS) tool of the OIE, food safety capacity assessment framework of FAO, and the Performance, Vision and Strategy (PVS) framework of IICA. However, all of these frameworks are of a technical nature and do not integrate consideration of gender or other socio-economic considerations.

SPS measures that require closer examination. The STDF, for example, could support the development and testing of this tool, in a similar manner to the P-IMA framework.

Finally, efforts are needed towards gender mainstreaming in the global governance of SPS measures, and specifically within the WTO and ISSOs. Whilst the secretariats of these organisations can play a role in promoting and administering this process, bringing about substantive and sustained change will require **leadership by the most influential WTO and ISSO members.**²⁴ Furthermore, lessons can potentially be learned on how best to achieve this from **a review of how other standards-setting organisations have integrated gender into their activities.**

With respect to the WTO, one immediate action that could be taken is for a **stream of work and/or thematic session on gender** to be proposed in the context of the fifth triennial review of the SPS Agreement.²⁵ This would serve to highlight the various ways in which gender is relevant to the implementation of the SPS Agreement. Furthermore, it would garner support for efforts to begin integrating gender into the workings of the SPS Committee and the ISSOs. That being said, it will need concerted effort on the part of at least one more influential member of the WTO and each of the ISSOs to ensure that gender issues actually make it onto meeting agendas. Initially, this will inevitably be on an *ad hoc* basis, but with sustained pressure the ultimate objective must for gender to be mainstreamed.

24 The SPS Committee has shown its willingness to introduce agenda items on issues that some consider to be outside of, or at least peripheral to, the remit of the SPS Agreement. One example is private standards.

25 Canada recently proposed a workshop or thematic session related to gender as part of the eighth triennial review of the Agreement on technical Barriers to Trade. See: G/TBT/W/532.

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