NAVIGATING THE TRADE LANDSCAPE

A Latin American Perspective Building on the WTO 13th Ministerial Conference

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TABLE OF CONTENTS

FOREWORD

This publication-a joint effort by the International Food Policy Research Institute (IFPRI) and the Inter-American Institute for Cooperation on Agriculture (IICA)-is being released in the context of growing changes and fragmentation in global economic and trade relationships. Countries are increasingly adopting protectionist measures in response to recent crises and the decreased competitiveness of value chains, due to rising production, marketing and transportation costs.

The complex multilateral trade system and the urgent need to implement concrete actions in this area are prompting countries to work towards the adoption of new standards that aim to protect and preserve the environment but could also become barriers to trade that impose a significant economic and social cost on other countries. The countries of the Americas must continue to support efforts to strengthen the multilateral trade system, ensuring that it is open, transparent and science-based, **as well as to effectively participate in discussion forums such as the ministerial conferences of the World Trade Organization (WTO).**

Amidst this scenario, international trade plays a vital role in transforming food systems, by interconnecting them and contributing to creating a more sustainable global food system.

In recent years, the growth of production and exports has converted Latin America and the Caribbean (LAC) into the largest net food exporting region in the world. *On average, agrifood exports from the region in 2021-2023 accounted for 17%*[1] *of global agrifood* exports, representing one fourth of total exports from the region. During that period, LAC agrifood exports grew by 7.6%. Yet, it bears mentioning that, despite its important role, the region has its share of challenges. During 2023, 85%[2] of LAC agrifood exports were directed at external markets and 53% of the value of exported agrifood exports was concentrated among only 10 products. This demonstrates the region's significant vulnerability and is undoubtedly a challenge that must be addressed.

This document is an inter-institutional effort to share ideas and reflections on the main issues to be tackled building on the 13th WTO Ministerial Conference. We hope that it will serve as input in strengthening the participation of the countries of the Americas in WTO multilateral negotiations, while also highlighting the key role of agricultural trade in agrifood system transformation.

Manuel Otero
Director General of IICA

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[1] IICA, based on data from the Trade Data Monitor, consulted in April 2024.

[2] Idem.

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Valeria Piñeiro, Adriana Campos and Martin Piñeiro

1 INTRODUCTION: CREATING CONTEXT AND UNVEILING CRUCIAL ISSUES

Martin Piñeiro and Valeria Piñeiro

BACKGOUND AND CONTEXT

The World Trade Organization's (WTO) 12th Ministerial Conference (MC12) was held in June 2022 in Geneva, Switzerland, after a year-long delay due to COVID-19-related travel restrictions and other disruptions. The same year, a new wave of export restrictions and trade disruptions resulted from Russia's invasion of Ukraine earlier that year, adding to the disruptions brought on by the pandemic. In many ways, these events were the beginning of geopolitical changes that have now led to a profound transformation in the structure of production and trade, including a growing tendency toward protectionism.

MC13 took place in Abu Dhabi, United Arab Emirates, in February 2024. Little progress was made in general, but especially in relation to agricultural trade. With respect to the latter, the main discussion centered on reducing trade-distorting agricultural subsidies to ensure fair competition, improving market access for developing countries by lowering tariff and nontariff barriers, addressing export restrictions to ensure stable supplies during food crises, and providing flexibility and support to developing countries through special and differential treatment. Additionally, strategies were discussed to enhance global food security amid challenges such as climate change and conflicts, aiming to create a more equitable and sustainable global agricultural trading system. However, positive outcomes from these discussions were few and not very significant.

The inability to achieve significant outcomes was mainly the result of the profound changes taking place in the international geopolitical and trading context. These changes have exacerbated the underlying problems that have negatively affected the WTO's negotiating processes in general-and agricultural trade agreements in particular-over the last two decades. The evolving geopolitical context has not only modified the political and institutional environment in which trade negotiations take place but also changed the perspectives and priorities of some countries that are main players in the organization. Consequently, they have also changed the relative priority of different problems on the negotiating table and available alternatives that could present a way forward.

This confluence of dramatic changes in the geopolitical trade environment and the absence of substantive advances in the negotiation process of the organization's overall agenda-and for agricultural issues in particular-has generated a sense of frustration and urgency. Taking a positive perspective, this frustration and urgency may result in a willingness to consider bolder

propositions that had not previously been acceptable. It is only with different, innovative new perspectives that progress can be made. Not doing so will endanger not only the negotiating processes but the very existence of the WTO.

This generalized feeling is behind the proposition made by Allan Wolff, a knowledgeable and respected voice in trade and WTO matters, when he says that the ministers should undertake profound institutional reforms[1]. But, recognizing that this outcome is unlikely, he has also suggested a short list of difficult but necessary areas of institutional reform. Three of them are of primary importance for improving the global trade environment and have special relevance for agricultural trade agreements:

1. Restore the dispute settlement mechanism
2. Establish the concept of open plurilateral agreements, granting them a clear legal status within the WTO's body of agreements
3. Adopt an agreed-upon framework for international cooperation to strengthen global food security[2]

These three institutional reforms, as well as other suggestions made by Wolff, substantiate his argument that the main priority of member countries engaging in agricultural trade negotiations must be to "restore the promise of the WTO to be a place where trade agreements can be negotiated, and where trade disputes are settled[3]."

It is clear that to respond to Wolff's very ambitious suggested objectives, member countries and the WTO management team should address the very substantive and politically charged issues mentioned above, which mainly relate to the WTO's overall structure and the procedures and rules by which deliberations and agreements take place.

Along this same line of thought-and thinking about the particular problems that exist in agricultural trade and negotiations-Wolff has suggested the need to adopt a work program for negotiating agricultural reforms. This should include a balance between the issues that have been at the center of discussions

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1 Wolff, A. 2023. "What's at Stake for America at the Upcoming WTO Ministerial Conference (MC13) at Abu Dhabi in February 2024? Notes for Remarks." Panel discussion at "What's at Stake for the United States at the 13th WTO Ministerial?", Center for Strategic and International Studies, Washington, DC, November 20. https://www.piie.com/commentary/speeches-papers/whats-stake-america-upcoming-wto-ministerial-conference-mc13-abu-dhabi

2 This third proposal could be expanded to include the conceptual articulation between environmental standards and trade regulations.

3 Wolff 2023, 3.

and disputes during the last two decades and relatively newer issues that have emerged and/or become more urgent because of the evolving geopolitical context. This perspective could serve as a general framework to define the main agenda of work leading to MC14.

Following this thought process, it seems clear that the discussions held during the next year and a half before MC14 should be organized around the following pillars: the first pillar includes the negotiating themes that are directly related to the Agreement on Agriculture and are still unresolved. The second pillar includes a collection of themes that have not been adequately addressed within the organization and urgently need to be incorporated into the main agenda.

For the first pillar's themes, which have been at the center of the discussion for some time, a review of discussions in the WTO and of the general literature on the subject suggests that three considerations hold long-term importance:

1. **Reducing subsidies and market distortions** that provide unfair advantages to some producers and distort global trade. The discussion on repurposing subsidies relates directly to this issue.

2. **Enhancing global food security through trade regulations** that strengthen and protect local food supplies in net-importing countries, as well as trade liberalization measures that increase productivity and trade possibilities for net-exporting countries.

3. **Addressing nontrade concerns** such as environmental issues, sustainability, animal welfare, and food safety standards by establishing guidelines that address these concerns while avoiding the creation of trade barriers.

For the second pillar, whose themes have newly emerged from the rapidly changing technological and geopolitical context, a wide-ranging,

controversial, and less-structured discussion is taking place in academic and political forums. In these discussions, the following three themes appear especially relevant and challenging for agricultural trade. These themes shape the overall perspectives and concerns that are addressed in this book:

1. Trade and technological tensions that emerge from growing economic competition between major economies pose challenges for compliance with trade rules and agreements. These include the establishment of new trade standards and norms, which should be agreed upon in the context of the WTO environment.

2. Supply chain resilience and security. Recent disruptions from the COVID-19 pandemic and global economic decoupling have highlighted existing vulnerabilities in global supply chains. Enhancing supply chain resilience and establishing new types of trade agreements that address the food supply insecurities of net-importing countries have emerged as new opportunities.

3. The incorporation of trade agreements has not been fully considered in WTO negotiations. These agreements fall into two categories: the first consists of plurilateral agreements and the second of so-called "mini-agreements." These mini-agreements include aspects not related to tariffs, such as trade facilitation, environmental concerns, quality and safety standards, and other specific aspects of trade conditionalities.

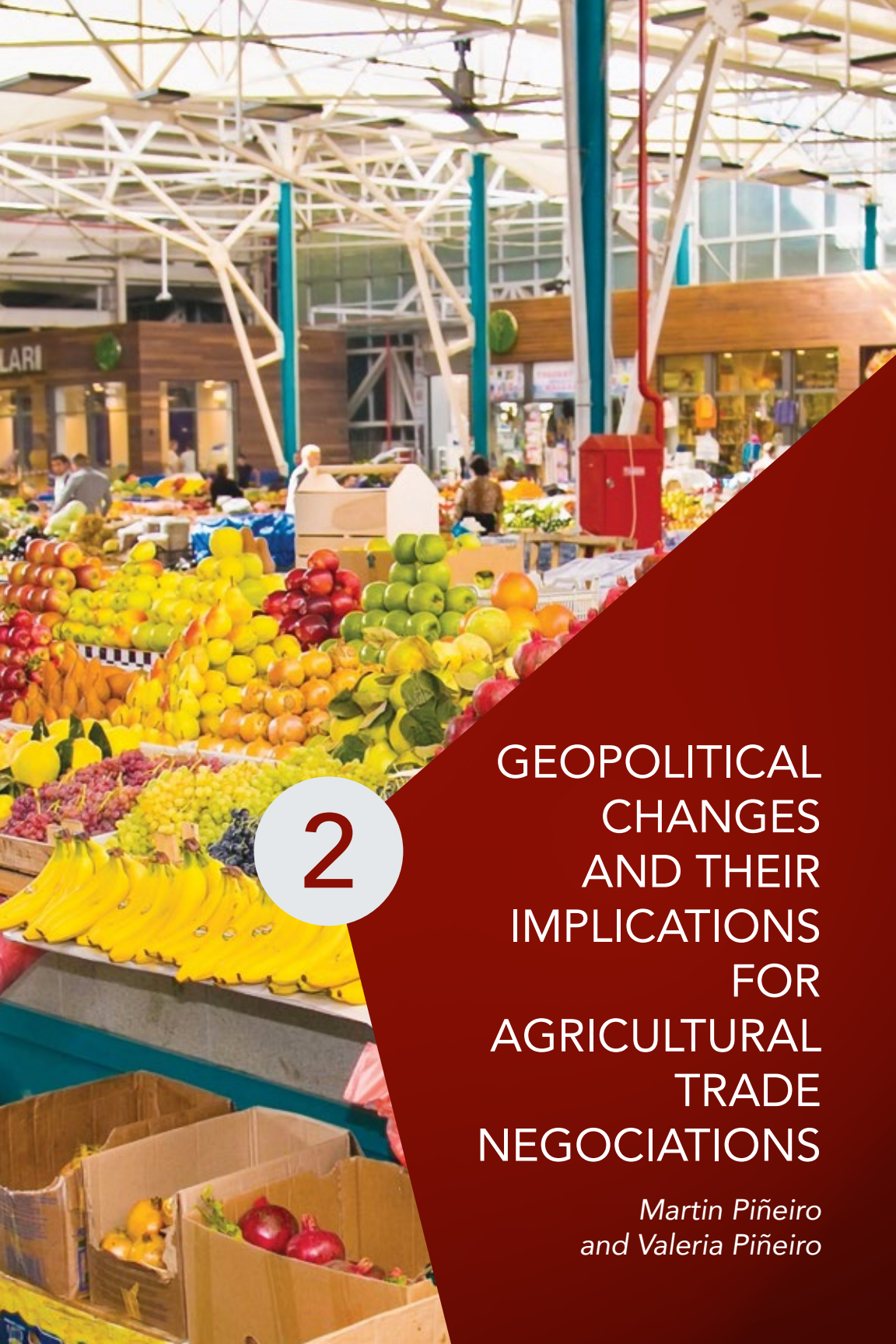
THE ONGOING DISCUSSION IN THE WTO AND THE INTENDED CONTRIBUTIONS OF THIS BOOK

The WTO's Director General has strongly encouraged member countries to consider some of the issues identified above and attempt to make progress through substantial reforms to and innovations in the topics considered and the way in which member countries work within the WTO.

This book aims to contribute to the ongoing analysis and discussion taking place around the first pillar, with special reference to the ongoing discussion within the WTO. These topics are considered through a broad perspective

that encompasses the changes taking place both in global geopolitics and in technology, and the way these changes affect trade in general and agricultural trade in particular. The analytical perspectives incorporate the views and special concerns of Latin America.

In the first of this book's nine chapters, the authors describe the geopolitical shifts and changing institutional landscape observed at the WTO. Following this discussion, chapters III to VII deal with ongoing agricultural negotiating priorities, including the three topics most discussed in 2023: public stockholdings, domestic support, and export restrictions. Chapters VIII and XI address new concerns around environmental considerations and their relation to agricultural trade. The analysis presented in these chapters emphasizes two important topics that have gained importance in multilateral discussions: the strong yet difficult relationships that exist between environmental concerns and agricultural trade, on the one hand, and food security concerns and agricultural trade, on the other. The discussion focuses on how to achieve a responsible and effective relationship between these considerations. Finally, Chapter X presents ideas and recommendations on how to build pathways for a possible way forward.



2

GEOPOLITICAL CHANGES AND THEIR IMPLICATIONS FOR AGRICULTURAL TRADE NEGOCIATIONS

Martin Piñeiro
and Valeria Piñeiro

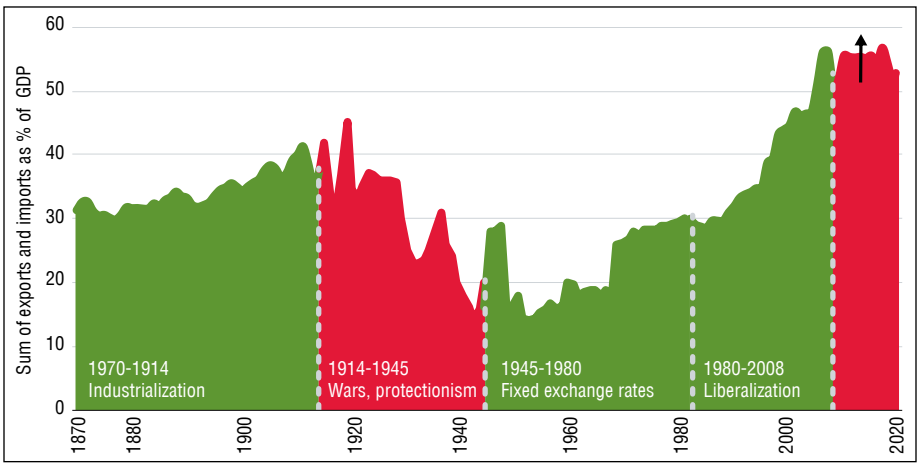
INTRODUCTION: TRENDS IN GLOBAL TRADE

The dissolution of the Soviet Union (USSR) in the 1990s marked a significant geopolitical shift, resulting in the clear and undisputed preeminence of the United States (USA) in global affairs. This new dominance was bolstered by the support of its closest allies, primarily the European Union (EU), Japan, Australia, and a few others.

In the wake of this geopolitical shift, a new phase of global economic interdependence emerged characterized by a growing reliance on trade and the development of global value chains, which connected production processes across multiple countries. This collaborative approach to production rapidly accelerated at the beginning of the 21st century and played a crucial role in the rapid economic development of countries like China and the Republic of Korea.

To illustrate this transformation, Figure 2.1 shows a rapid growth in trade starting in the 1970s and lasting about four decades until the financial crisis of 2007/2008. After the crisis, global trade as a share of GDP stabilized up through the present day.

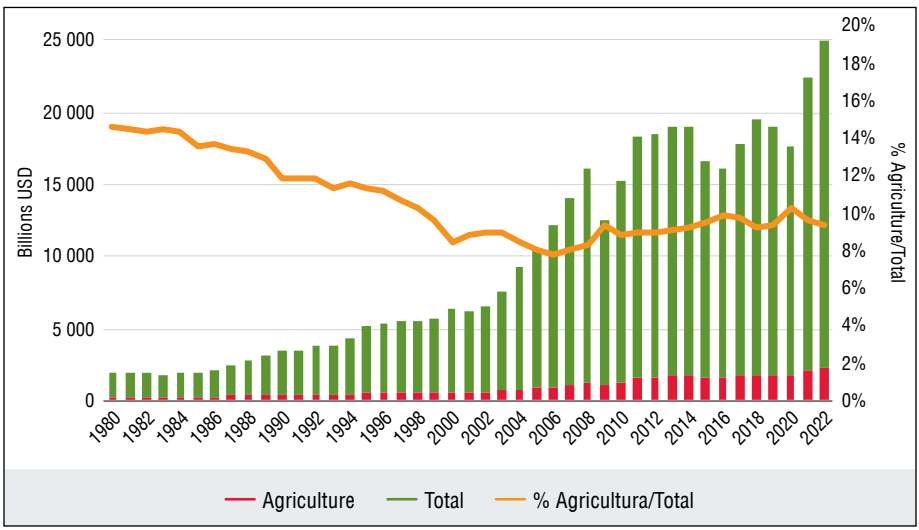
FIGURE 2.1 The phases of Global Integration
Sum of exports and imports as percentage of GDP



Note: The Figure is a replication of Sample's composition changes over time. Source: Peterson Institution for International Economics; Jordà-Scholarick-Taylor Macrohistoric Database; Pen World Table (10.0); World Bank; IMF Staff Calculations.

In contrast, Figure 2.2 highlights that agricultural trade, after years of decreasing as a proportion of total trade, stabilized around 2006. This stabilization was mainly due to the rapid growth in food demand by China. Moreover, Figure 2.2 indicates a slight increase in agricultural trade as a proportion of total trade over the last 15 years. This trend suggests the greater stability of food demand and the trading needs that result from this demand, even amidst economic instability such as the recent global financial crisis and the Covid-19 pandemic.

FIGURE 2.2 ▶ Evolution of total trade and global agriculture trade.
Billions of USD – CUCI Rev. 3. 1980-2022



Source: Own elaboration based on estimates from World Trade Organization.

While the initial weakening of global trade was attributed to the 2007/2008 global financial crisis and the Covid-19 pandemic, it has now become clear that the more significant and lasting changes are the result of profound global economic transformations, which began during those years and have since accelerated.

These global economic transformations have led to significant changes in the geopolitical landscape, driven by two key factors. First, the escalating competition between China and the USA is reshaping international relations across trade, security, and diplomatic alliances. Second, technological advancements and the imperative response to climate change are propelling a sweeping energy transition away from conventional fossil fuels towards more sustainable alternatives.

As these changes unfold, their impact on global trade becomes increasingly evident. Trade relationships are evolving to align with shifting geopolitical realities and the imperative for a sustainable energy transition. These shifts extend beyond economic considerations, influencing international cooperation and diplomacy.

The institutional frameworks governing global trade must adapt to navigate this new reality. Traditional structures and agreements may need recalibration to accommodate the nuances introduced by geopolitical realignments and sustainability imperatives. This adaptation process will involve negotiations, diplomatic initiatives, and collaborative efforts to establish frameworks fostering fair, inclusive, and sustainable global trade.

In summary, the dynamics driven by geopolitical shifts, technological advancements, and climate imperatives are ushering in a new era in international trade. Navigating this transformative landscape requires a proactive and adaptive approach in constructing trade relationships and shaping institutional frameworks. As the global community grapples with these changes, the challenge lies not just in understanding their immediate implications but also in charting a course for resilience and trade inclusivity in the face of an ever-changing world order.

AN EVOLVING GLOBAL TRADE CONTEXT

Up until the 2007/2008 financial crisis, international trade was primarily governed by the multilateral trade rules agreed upon by many countries within the framework of the WTO. Additionally, various regional agreements adhering to the principles of multilateralism complemented international trade. Simply put, during this period, political issues and geopolitical rivalries between countries had a limited impact on transnational investments or global trade. During this era, when political considerations were not strong conditioning factors in economic relations, trade dynamics were mainly defined by the relative competitiveness and trade policies of each country, which resulted in surprisingly strong economic growth of some emerging countries such as China, the Republic of Korea, and others.

This relatively apolitical trade regime began to change after the financial crisis in 2007/08. One main element was the perception by many, but especially by the USA government, that China's rapid economic growth had been possible, at least in part, by not complying with some of the basic rules of

multilateralism. The main complaints have emphasized the role of the state in providing subsidies for the development of industrial firms and applying protectionist measures to slow imports all of which have been instrumental to attain the rapid economic development achieved by China[1].

The increasingly competitive and confrontational relationship that formed between the USA and China is evolving into the consolidation of two major economic and defensive alliances with a growing number of middle-sized countries adopting more flexible and independent positions[2]. Examples of this include the consolidation and expansion of the BRICS and the growing international importance of countries such as India, Brazil and Saudi Arabia in the governance of global initiatives and institutions.

This new and more conflictive geopolitical context is generating two major impacts:

a. the proliferation of regional armed conflicts, mainly in Ukraine and Israel but also in parts of Africa (like Sudan and Somalia) and in the Arab world.

b. negative perceptions in the western alliance on the global political role of China resulting in several economic and trade measures aimed at the economic containment of China.

One of the most important of these trade-related measures has been the adoption of a new industrial policy, first in the USA but now in the EU and in some other countries. This strategy follows what China, Japan, the Republic of Korea and many others have done successfully for many years as a basic instrument of their economic development policies.

The new industrial policies being implemented by the USA, and progressively by other countries, are based in a much stronger role of government in the organization, funding and protection of activities that are considered of "National Interest." For the time being, actions have concentrated on those sectors that are considered important from a national security point of view, but it is likely that in some cases/countries they may be extended to other

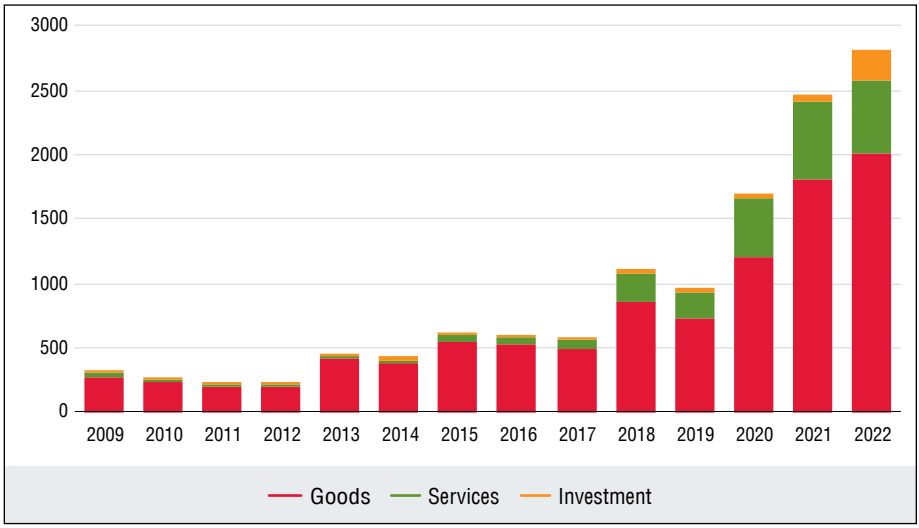
[1] For a discussion and analysis of these issues see: a) Richard Hass. The dangerous decade. Foreign Affairs. Sept/Oct. 2022 and b) Emma Ashford. The persistence of great-power politics. Foreign Affairs February 20, 2023.

[2] For a discussion of this subject see: a) Jorge Heine. The Global South is on the rise-but exactly what is the Global South. The Conversation, July 3, 2023. And b) Pineiro M and V. Pineiro Geopolítica de los alimentos en un mundo en transición: una perspectiva desde los países miembros del MERCOSUR. CARI/GPS. Mayo, 2022.

activities that are important from an employment or regional development perspectives[3].

It is obvious that these policies diverge from the principles of multilateralism[4]. In addition, as shown in Figure 2.3, these policies have been accompanied by several traditional trade protectionist measures. These are probably responsible for the close to 5% decrease in global trade expected by UNTAD for 2023[5].

FIGURE 2.3 ▶ Number of trade restrictions imposed annually worldwide.



Source: Global Trade Alert; IMF Staff Calculations.

The combination of policies that promote the national production of certain goods and services and the evolving political environment that includes actions to build closer associations with "thinkalike countries" and more conflictive relations with others, have led to the progressive "decoupling" of some economies, mainly USA and the UE, with China, Russia and some other countries politically associated to them.

These actions also resulted in the progressive implementation of more instrumental concepts such as nearshoring and friendshoring where main

[3] See for example Chae, Ling and Miles Evers. Wars without gun smoke. Global supply chain, power transitions and economic statecraft. International Security. Vol.48 No2 Fall 2023 164-204.

[4] This explains, at least in part, the reluctance of the USA government to allow the functioning of the WTO appellate body.

[5] UNCTAD News December 12,2023.

value chains are reconstructed with the participation of countries that have a closer political and historical association. According to UNCTAD friendshoring has become more prominent after 2022 something which has not yet happened with nearshoring[6].

This evolving process is contrary to the basic concept and implicit rules of multilateralism and could lead to a wide process of deglobalization with considerable global economic costs[7]. However, as Ngozi Okonjo-Iweala, World Trade Organization Director General, correctly points out, the world should avoid deglobalization and concentrate in promoting a process of "Reglobalization," which protects trade and economic integration while taking into consideration the new limitations imposed by geopolitical conditions[8].

This perspective raises major challenges to trade negotiations because it implies that many of the traditional disciplines that have been the bread and butter of negotiation activities in the WTO become obsolete or where it is impossible to attain progress. In addition, it also raises questions and the efficiency and efficacy of trade institutions, mainly WTO. Changes are needed to maximize the capacity of these organizations in two areas: a) identifying and respond to the new restrictions and needs, and b) taking advantage of the new trade opportunities and priorities, that emerge from the economic transformations taking place, which in many cases are maladapted to the multilateral framework.

Progressing in this direction will most likely require significant changes in the ways countries interact with the WTO and the priorities on which the organization should concentrate in the negotiation processes[9]. Thus, the main challenge that the organization and its members face today is to correctly assess the new international context, adapt the ways in which the organization works. The WTO will also need to reprioritize internal mechanisms, trading themes, and the types and characteristics of trading agreements, to adapt them to the new circumstances.

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6 However, there are some obvious cases like the relationship established recently between USA and Mexico to produce semiconductors.

7 Georgieva, Cristalina. The price of fragmentation. Foreign Affairs. September/October,2023.

8 Ngozi Okonjo-Iweala. Why the World still needs trade Foreign Affairs. July/August 2023.

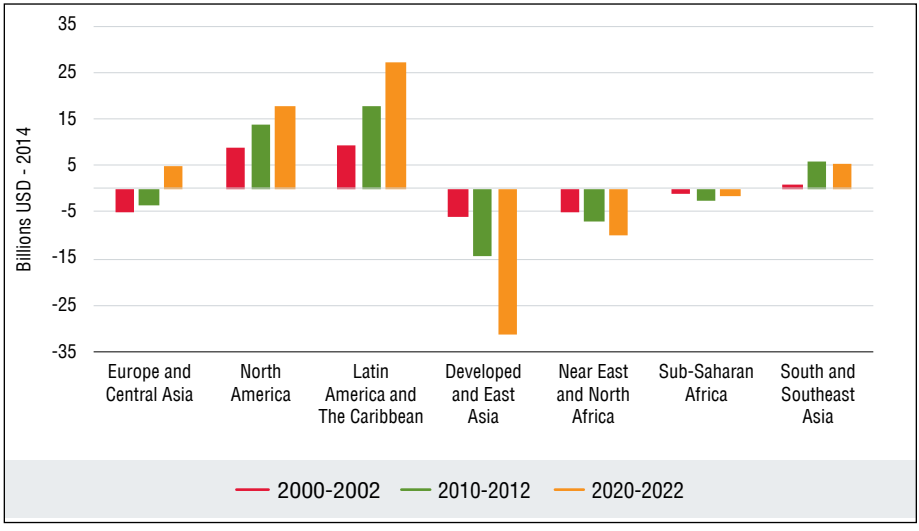
9 For an interesting description of the institutional problems in the WTO see: Fernando de Mateo. Situation actual y perspectivas de la OMC Comexi, 2024.

AGRICULTURAL TRADE: THE NEED TO DEAL WITH PRIORITIES THAT EMERGE FROM THE NEW GEOPOLITICAL CONTEXT

As shown in Figure 2.2 agricultural trade expanded, as a proportion of total trade, after 2006. A substantial proportion of this growth is explained by the additional food imports from China and a few other Asian countries as they industrialized and increased their per capita income.

Figure 2.4 shows the main regions of the world according to their net exporting or importing position. This shows the major role Western Hemisphere countries such as Brazil and Canada play as net exporters as well as the role of Asia, the Near East, and North Africa as importers.

FIGURE 2.4 ▸ Net food exports by region.



Source: Authors based on OECD/FAO (2024), "OECD-FAO Agricultural Outlook".

On the other hand, in Figure 2.5, countries are grouped based on their overall political alliance. The Figure shows a substantial geographic and political imbalance in food trade needs. The western alliance is a net food exporter while the group loosely led by China, and to some extent Russia, is a net food importer.

FIGURE 2.5 ▶ Net food trade, 2022: the west and group led by China.

Source: Food excluding fish. FAOSTAT. Accessed March 2024.

This regional imbalance is a direct consequence of the relative endowment of agricultural natural resources, including water, that countries/regions possess and consequently their productive capacities at reasonable production costs. In recent years, it has also become clear that countries better endowed in agricultural natural resources can also develop production strategies more compatible with climate change and ecological sustainability concerns.

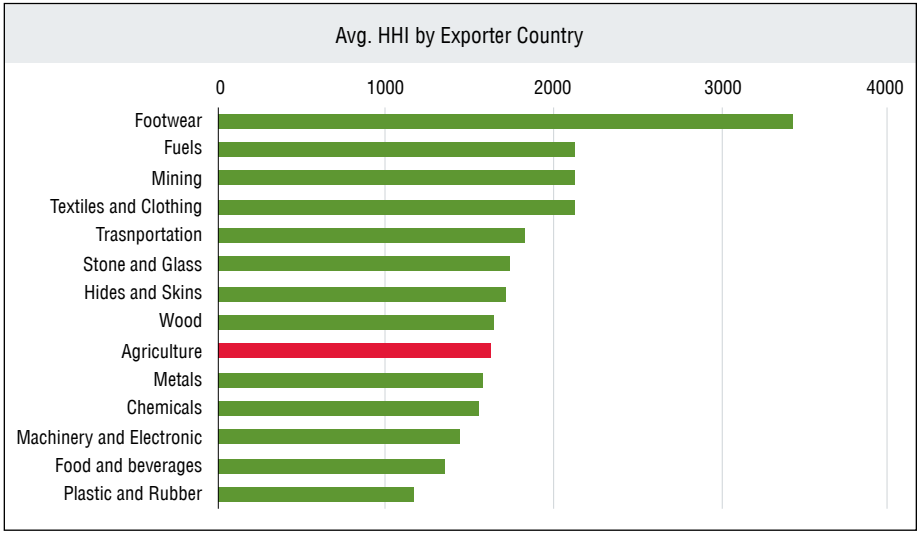
Thus, food trade is a fundamental instrument, and will be even more in the future, to compensate for the significant imbalances that exist between food production capacities and food consumption in different regions. A disruption

of food trade would result in extensive famines in an important segment of global populations.

It is also important to note that, as shown in Figure 2.6, trade is relatively concentrated in terms of the origin of exported goods. Most importing countries depend on a relatively small number of exporting countries for their supplies.

Figure 2.6[10] shows the level of supply concentrations of major traded goods, including main agricultural commodities. The figure shows the relatively high concentration of supply sources in agriculture where, in many cases, three or four countries are the major suppliers of food commodities to major importing countries.

FIGURE 2.6 Sectorial Average Concentration, calculated by exporter countries in 2022



Source: Own elaboration based on UN COMTRADE.

[10] The HHI was calculated considering the participation of exporting countries in the total exports of each of the 4-digit products in 2022. Then, the average was obtained per group, where these were defined as follows:

Sector	HS-02	Sector	HS-02
Agriculture	01-15	Metals	72-83
Chemicals	28-38	Mining	25-26
Food and beverages	16-24	Plastic and Rubber	39-40
Footwear	64-67	Stone and Glass	68-71
Fuels	27	Textiles and Clothing	50-63
Hides and Skins	41-43	Transportation	86-89
Machinery and Electronic	84-85	Wood	44-49

These circumstances suggest the geopolitical importance of measures to safeguard food trade from policies or specific actions that may hinder efficient and effective global food trade. Given the growing uncertainties of the trade environment, such disruptions could threaten the food security of net importing countries.

These arguments suggest that, from the perspective of improving the trading environment and the role played by the WTO, there are three main areas of work that seem to be especially important and/or urgent[11].

First, the need to work on establishing clear rules and agreements for dismantling subsidies that work against the global relocation of agricultural production following an optimal geographic distribution from a natural resource, sustainability, and climate change perspective. This involves augmenting production in regions with efficient and sustainable practices to meet growing global demand. Repurposing domestic support is essential to achieve global sustainable production. Redirecting resources in this way can contribute significantly to this effort by fostering R&D, adoption, and investment in countries possessing natural resources but lacking the necessary technologies for sustainable production.

Second, to define and agree on policies regarding public stock holdings that take into consideration the needs of net importing countries in the face of global trade uncertainties. Two new uncertainties are of special significance:

a. the geopolitical landscape and the potential limitations that a more conflictive world could impose on trade in general and the capacity of importing countries to secure consistent access to food through trade[12].

b. the potential disruption of food trade logistical chains. Because of their bulky nature most food exports are transported by ships. These ships in most cases need to go through the Suez Canal, the Panama Canal, the Black Sea and/or the Indo-Pacific Sea, all of which are increasingly facing disruptions that may affect food trade[13].

[11] These suggestions should be red in the context of the analysis and recommendations found in: a) Ngozi Okongo-Iweala Op.Cit. and 2) Fernado de Mateo Op.Cit.

[12] International Crisis Group. 10 conflicts to watch in 2024. July 1, 2023.

[13] The recent problems in the Black Sea and the impact they had on the prices of wheat, sunflower and fertilizers is an example of potential future problems.

Third, the development and institutionalization of frameworks for bilateral and plurilateral trade agreements between net importing and net exporting countries that aim to help net importing countries obtain reliable food supplies despite the more uncertain trade environment.

These three themes are important and urgent in the construction of a more effective agricultural trade environment adjusted to the geopolitical realities. However, they are only one small part of the needed and urgent more general and overarching modernization of the trade environment in general and the strengthening of the WTO.

3

AGRICULTURE NEGOTIATIONS PRIORITIES AND SUSTAINABLE DEVELOPMENT AT THE WTO

Gloria Abraham Peralta and Adriana Campos

INTRODUCTION

This chapter highlights the fact that many international trade stakeholders agree on the urgent need to **strengthen the multilateral trade system** and its governing body, the World Trade Organization (WTO). This will mean that the WTO will need to strengthen its intrinsic negotiating function, in particular its ability to achieve results in different processes in the trade agenda, and particularly in the negotiations on agriculture. Indeed, it has failed to completely fulfill its mandate to deepen the reform process, through the adoption of key disciplines in the major negotiation pillars, among them, domestic support, export restrictions and **the search for innovative options to fulfill the Bali mandate on the establishment of public entities to promote food security.** Moreover, negotiations on other issues that are relevant to a significant group of countries, such as market access, are moving at their own pace.

Undoubtedly, tackling major challenges such as **food security and climate change** will require **innovation and the adoption of new technologies and science,** in order to increase production and the productivity of agrifood systems. Production volume, quality and sustainability must be improved, without losing sight of the fact that producers are social and economic players in the countries whose economic activity must be profitable. It must also be mentioned that trade and national production play an important role in achieving **global food security.**

STRENGTHENING MULTILATERALISM

During the first quarter of the 21st century, multilateral trade has been the cornerstone of economic growth and development, particularly in developing countries. Thus, to enhance the strategic role of agrifood trade, nations must streamline this system to make it more open and transparent, while ensuring that its rules are based on scientific criteria. As such, members must **participate effectively in forums such as the WTO ministerial conferences.**

After a protracted and complex negotiation process, the creation of the WTO in 1995 marked a step forward in bolstering the legal framework and defining rules to govern international trade dealings among countries. Of particular note in the case of agrifood trade was the adoption of disciplines that seek to: 1) increase market access, 2) improve market stability, 3) apply appropriate mechanisms to curtail unfair trade, 4) foster investment and innovation and 5) promote sustainable development.

In recent years, various economic and political events have erupted on the international scene, which have undermined the relationship between countries, which are the fundamental players in the multilateral trade system. This new dynamic has not created an enabling environment for members to reach a consensus on fundamental issues, such as trade rules, which has negatively impacted the proper functioning of global value chains.

This has weakened the multilateral trade system and directly affected developing economies, particularly those that are linked to international trade flows, which demonstrates the urgent need to work on bolstering the multilateral system, and in particular on reformulating the institutional structure that supports it. According to the Director General of the WTO, it calls for a "reglobalization" effort.

As such, there are various specific issues that need to be evaluated, and in some cases redefined:

- In the WTO, the adoption of decisions by consensus has become a complex task, given the absence of a positive, agile and flexible approach that makes the process more expeditious. Therefore, alternatives to consensus must be identified.

- The different crises experienced since 2008 have prompted some members to increase the adoption of protectionist measures, such as unilateral trade restrictions, increased subsidies, the use of domestic policy regimes as a justification for not adopting decisions and the failure to comply with mandatory notifications within the appointed time and manner.

- The war in Ukraine has triggered more intense geopolitical discussions. There is a growing insistence on regrouping countries according to political affinity or geographic proximity (*friendshoring and nearshoring*), eventually resulting in economic decoupling, which is seen as an alternative to globalization and to the rules that underpin multilateralism.

- The strengthening of transparency has been employed as a cross-cutting tool.

- The full functioning of the Dispute Settlement Body is one of the crowning achievements of the agreements that led to the establishment of the WTO.

- Greater regulatory convergence is being sought, given that the proliferation of varying regulations could impede cross-border trade, even if the regulations have legitimate objectives.

The restructuring of multilateralism, in general, and of agrifood trade, in particular, is essential in order to tackle current challenges and ensure fair and sustainable trade at the global level. New strategies and policies must be formulated to strengthen the WTO, not only with respect to its traditional areas of priority, but also in relation to new disciplines that have been incorporated in the global scenario.

The countries of the Americas, primarily in LAC, have benefitted from multilateral trade and from the existence of the WTO, and therefore should commit to processes to strengthen it. They currently chair some of the regular bodies of the Organization and participate in special negotiation groups, joint initiatives and declarations; and in the “Friends of the System” groups, which undertake initiatives to create closer ties with less proactive members to deepen trade reform. This is tremendously important as it could promote the execution of more effective joint actions to benefit the region in the restructuring of the WTO.

INTERRELATIONSHIPS LINKED TO INTERNATIONAL TRADE

An **integrated, simultaneous and multi-faceted approach** to various **economic, social and environmental issues** is required, embodied in four main concepts: a) national production, b) international trade, c) the development of **science, technology and innovation** and d) **climate change adaptation,** which are fundamental to the formulation of new public policies to benefit food security and environmental sustainability in the Americas.

International trade helps producers, particularly those from developing countries, to access **innovation** and new tools that facilitate their entry to international markets. **Technological innovation** in the agrifood sector provides the necessary tools to produce safe, nutritious and affordable food for the global population, and at the same time, contributes to climate change mitigation and adaptation.

There is a growing trend in international markets to unilaterally approve and implement **environmental rules** with no scientific justification, based on unclear criteria and insufficient studies, creating unnecessary technical barriers to the trading of agricultural products, impeding access to international markets and reducing the competitiveness of producers.

CONCLUSION

For several decades international trade has been an essential component of the strategy adopted by Latin American and Caribbean (LAC) countries, which have promoted entry into the international economy as a source of export markets and direct foreign investment.

Since the WTO was created, international trade has been dynamic and experienced substantial growth, which suggests that the organization's establishment and the adoption of rules governing the international trade of goods and services have been beneficial for member countries, including those in LAC. According to the Trade Data Monitor (2023), during the 2020-2022 period, on average, the Americas and LAC accounted for 30.2% and 16.5% of global agrifood exports, respectively.

The smooth functioning of the multilateral trade system will guarantee better conditions for developing countries to participate in international trade, in particular, net food exporting countries.

This positive performance will depend on the modernization of the WTO. Thus, the revision of existing regulations to tailor them to current conditions, must incorporate innovative disciplines, such as those related to the sustainability of production, trade and food security.

4

AGRICULTURE NEGOTIATIONS PRIORITIES AND SUSTAINABLE DEVELOPMENT AT THE WTO

Facundo Calvo

INTRODUCTION

WTO agriculture talks gained impetus in the run-up to MC13

During a meeting of the WTO Committee on Agriculture in Special Session (CoASS) in June 2023, agricultural negotiators made new submissions on domestic support and export restrictions. Submissions on domestic support were made by the African Group, the Cairns Group -a coalition of developed and developing agricultural exporting economies-, and Costa Rica. The United Kingdom also submitted an analytical paper on export restrictions, making the case for WTO members to pursue more focused discussions on the food security impact of export restrictions on agricultural products, based on data and members' experiences[1].

The revitalization of the domestic support pillar in June 2023 occurred almost simultaneously with a renewed interest on the issue of food bought by developing economies at administered prices, commonly referred to as public stockholding for food security purposes (PSH) in WTO jargon. In late June 2023, a group of proponents convened an information session on PSH at the request of the G33, a large coalition of developing countries seeking additional flexibilities. The purpose of the session was to discuss the manner

[1] WTO (2023), *New submissions revitalize agriculture talks ahead of ministerial conference,* https://www.wto.org/english/news_e/news23_e/agng_22jun23_e.htm

in which market price support is calculated under the WTO Agriculture Agreement when procuring food for public stocks. The information session addressed the fixed external reference price (FERP), which is used to calculate the current aggregate measurement of support (AMS) under the WTO Agriculture Agreement. Discussions focused on the history of the FERP, its current relevance for PSH, and the need to change the FERP to a dynamic external reference period[2].

Domestic support and PSH are particularly relevant to the extent that they remain at the center of the current impasse in the WTO agriculture negotiations. In fact, the success of WTO agriculture negotiations is likely tied to progress in these two issues. At present, WTO members differ greatly in their understanding of the concept of domestic support, especially in relation to public stockholding. For many developing countries, such as India and China, and negotiation blocs, like the G-33 and the African Group, public stockholding is a stand-alone issue that should be addressed individually, not as part of broader discussions on how to cap and reduce trade-distorting domestic support. They consider that any permanent solution on public stockholding, including how to calculate market price support and the negotiation of product/country coverage for new public stockholding programs, should be addressed separately from ongoing negotiations regarding new means for reducing trade-distorting domestic support[3].

Over the past few years, export restrictions have been at the top of the WTO's agriculture negotiations agenda, especially after WTO members reaffirmed the importance of not imposing export prohibitions or restrictions at the Twelfth Ministerial Conference (MC12) in June 2022[4]. After the United Kingdom submitted its analytical paper on export restrictions, Japan presented its own paper on improving transparency regarding export prohibitions and restrictions to ensure medium- to long-term food security[5]. Almost simultaneously, the coalition of least developed countries at the WTO (LDC group), submitted a draft ministerial decision to exempt LDCs and net food-importing developing countries (NFIDCs) from export prohibitions or restrictions[6].

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[2] WTO (2023), *Summary of the information session on external reference price for public stockholding for food security purposes programme,* WTO document JOB/AG/246 (restricted).

[3] Calvo, F. (2024), *World Trade Organization Agriculture Negotiations at MC13,* https://www.iisd.org/articles/policy-analysis/wto-food-security-agriculture-negotiations-mc13

[4] WTO Ministerial Declaration on the Emergency Response to Food Insecurity (2022), https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:/WT/MIN22/28.pdf&Open=True

[5] WTO (2023), *Elements to be examined for improving the transparency of export prohibitions and restrictions to ensure medium- to long-term food security,* WTO document JOB/AG/252 (restricted).

[6] WTO (2023), *Ministerial Decision on Least Developed Countries and Net Food-Importing Developing Countries Exemption from Export Prohibitions or Restrictions,* WTO document JOB/AG/251, https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:/Jobs/AG/251.pdf&Open=True

AGRICULTURE NEGOTIATION PRIORITIES AND SUSTAINABLE DEVELOPMENT

As WTO members began preparing for the WTO Ministerial Conference (MC13) in the United Arab Emirates in February 2024, the International Institute for Sustainable Development (IISD) and the International Food Policy Research Institute (IFPRI) organized a series of webinars on the WTO Agriculture Negotiations and Sustainable Development. These webinars, held in late September 2023, sought to share insight from the research community regarding how WTO rules on agricultural trade could better contribute to food security and environmental sustainability, as set out in the preamble of the WTO Agriculture Agreement. During the webinars, WTO negotiators, capital-based officials, and independent experts discussed how to mainstream sustainable development objectives into areas of the WTO agriculture negotiations which gained renewed momentum in the run-up to MC13, including domestic support, public stockholding for food security purposes (PSH), and export restrictions.

The following lines, which have been taken from the summary produced by IISD and IFPRI immediately after the webinars, provide an overview of the main issues discussed by WTO negotiators, capital-based officials, and independent experts[7]. While the relationship between the WTO agriculture negotiations and sustainable development goes well beyond negotiation issues such as domestic support, PSH, and export restrictions, these were chosen given their renewed momentum in the lead-up to MC13. The relationship between the remaining negotiation issues and sustainable development is explored in the following section.

The first webinar in this series focused on “Domestic Support Rules to Promote Food Security, Climate Action, and Healthier Diets”. This webinar explored how WTO agriculture negotiations on domestic support can promote sustainable development objectives, such as food security, climate action,

[7] IISD and IFPRI (2023), *WTO Agriculture Negotiations and Sustainable Development,* https://www.iisd.org/events/wto-agriculture-negotiations-sustainable-development

and healthier diets, while addressing negative impacts on production and trade. The webinar brought together agricultural trade experts to discuss ideas proposed in the current negotiations, including (i) reductions of product-specific support, especially support that is highly concentrated in emissions-intensive products or unhealthy food commodities; (ii) the potential of the Green Box subsidies allowed under the WTO Agriculture Agreement to achieve sustainability objectives, including water management, biodiversity, and climate change; (iii) how repurposing agricultural support can contribute to healthier diets; and (iv) the opportunities and challenges associated with repurposing agricultural support to consumers.

Experts argued in favor of using product-specific caps to avoid the concentration of agricultural support in a few commodities, including emission-intensive commodities (e.g., beef, milk, and rice) or unhealthy foods (e.g., sugar). One of the key takeaways was that concentrating agricultural support in a few commodities could cause large distortions in production and trade, leading to substantial losses for producers in countries that fail to match subsidy levels, such as cotton-producing countries in West Africa[8]. In that regard, experts found that product-specific caps to avoid a concentration of agricultural support in a few commodities would not only reduce highly distortive support but also increase agricultural production in middle and low-income countries (except Brazil, Russia, India, China, and South Africa [BRICS countries])[9].

Experts also discussed how to leverage domestic support to achieve sustainability objectives, including climate action and healthy diets. They underlined the fact that, although the WTO Agriculture Agreement provides a good amount of flexibility to grant payments for water management, enhance biodiversity, and mitigate climate change, further amendments to the WTO's Green Box could assist in achieving these sustainability objectives[10]. One such example could be adding nuance to the wording of the fundamental requirement of the Green Box subsidies, which establishes that these subsidies shall have no, or at most minimal trade-distorting effects or effects on production.

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[8] Glauber, J., Laborde D., and Piñeiro, V. (2021), *Harmonizing and Reducing Trade Distorting Domestic Support: An analysis of the impacts of new domestic support disciplines at the WTO*, IFPRI project report, https://ebrary.ifpri.org/utils/getfile/collection/p15738coll2/id/134803/filename/135016.pdf

[9] Piñeiro, V., Glauber, J., and Laborde, D. (2023), *Domestic support disciplines: product-specific caps to avoid concentration,* https://www.iisd.org/system/files/2023-10/webinar1-valeria-pineiro-ifpri-product-specific-caps.pdf

[10] Brink, L. and Orden, D. (2023), *Water management, biodiversity, and climate change: Potential for Green Box exceptions,* https://www.iisd.org/system/files/2023-10/webinar1-lars-brink-green-box-climate-action.pdf

There was also some discussion of the relationship between domestic support and healthy diets. Experts noted that repurposing agricultural support to make healthy diets more affordable entails important trade-offs for countries across the world[11]. There are trade-offs, for instance, between increased greenhouse gas (GHG) emissions and the affordability of healthy diets, as well as other important considerations, such as farm incomes and the prevalence of undernourishment.

Finally, reference was made to the potential of consumer support (vis-à-vis agricultural support targeting specific commodities, which often has trade-distorting effects) to promote healthier diets. Experts emphasized that consumer support, included under the WTO's Green Box as domestic food aid to segments of the population in need, could increase the purchasing power of poor consumers, improve caloric intakes, and yield healthier diets[12].

The second webinar, "Public Stockholding (PSH) Programs to Promote the Food Security of WTO Members", explored the ways in which new approaches to PSH can promote domestic food security while limiting harmful impacts on trading partners. Discussions focused on (i) the objectives and impacts of PSH programs on both food security and trade, (ii) updating the fixed external reference price (FERP) to calculate market price support for PSH programs, and (iii) options for WTO members to consider when negotiating a permanent solution for PSH.

Experts discussed the objectives of public stockholding programs, including distributing food, protecting consumers by stabilizing prices and reducing their vulnerability to price shocks, as well as supporting rural incomes. They also referred to the possible impacts-both positive and negative-of PSH programs on producers, consumers, and government budgets. They called for ensuring proper targeting of PSH programs, both in procurement and in food distribution, to reach the most vulnerable populations. Participants mentioned that these programs should be carefully evaluated against other policy alternatives, given their market impacts and significant costs[13].

Experts highlighted the fact that food price increases in the mid-2000s had caused food prices to diverge significantly from the 1986–88 base-level FERPs

[11] Laborde, D. (2023), *Repurposing food and agricultural policies to deliver affordable healthy diets, sustainability and inclusively: Should we do it? Could we do it?,* https://www.iisd.org/system/files/2023-10/webinar1-david-laborde-fao-repurposing-ag-support-helathy-diets.pdf

[12] WTO Agriculture Agreement, Annex 2, paragraph 4, https://www.wto.org/english/docs_e/legal_e/14-ag_02_e.htm#annII

[13] Avesani, C. (2023), *Overview of public food stockholding programmes: policies and practices,* https://www.iisd.org/system/files/2023-10/webinar2_cosimo_avesani_fao_-_overview_of_psh_programmes.pdf

used to calculate market price support for PSH programs. Responding to debates around the need to update FERPs, one expert suggested updating the concept of market price support within the WTO by using a moving average of recent border prices rather than FERPs[14]. He claimed that such an alternative could largely resolve the PSH impasse. In the case of developing countries and users of PSH programs, complying with their domestic support commitments would not require reducing artificially high measurements of market price support. In the case of other countries, especially those that propose constraints on the use of PSH programs, this alternative could ensure that WTO disciplines on market price support have a sound economic basis. Finally, experts discussed possible options for a permanent solution to PSH[15].

In addition to updating the FERP to calculate market price support for PSH programs, these options include (i) revisiting the definition for "eligible production", which is also an important element in calculating market price support for PSH programs; (ii) exempting support when pre-announced "administered" or "fixed" prices are set below international market prices; (iii) exempting least developed countries (LDCs) and smaller economies from the requirement to count food purchased at "administered" or "fixed" prices in the aggregate measurement of support (AMS) or agreeing not to challenge the compliance of their PSH programs through the WTO dispute settlement process; and (iv) establishing a permanent solution based, to some extent, on the 2013 Bali Decision on PSH,

[14] Orden, D. and Brink., L. (2023), *Recalculation of MPS to address the PSH issues,* https://www.iisd.org/system/files/2023-10/webinar2-david-orden-virginia-tech-redefining-market-price-support-wto.pdf

[15] IISD (2021), *Procuring Food Stocks under World Trade Organization Farm Subsidy Rules: Finding a permanent solution,* https://www.iisd.org/system/files/2021-08/food-stocks-wto-farm-subsidy-rules.pdf

under which WTO members would agree not to challenge the compliance of a developing country member with its obligations under the WTO Agriculture Agreement regarding their maximum allowed levels of domestic support[16] [17].

The third and final webinar of the series, "Export Restrictions Rules to Promote Global Food Security in the Context of Climate Change and Extreme Weather Events", covered (i) the effectiveness and impacts of export restrictions; (ii) how climate change and more frequent extreme weather events, such as droughts, heat waves, precipitation, and floods, reduce agricultural crops and yields and exacerbate the impacts of climate change and risks to global food security; (iii) options to improve the monitoring of export restrictions; and (iv) the impacts on food security of exempting food purchases by LDCs from agricultural export restrictions (the so-called LDC Exemption).

Experts stressed that while WTO members impose export restrictions to ensure the availability and affordability of food and agricultural products for their own consumers, these trade-restrictive measures tend to reduce food access in other economies, particularly in import-dependent countries that rely heavily on global agri-food markets[18].

One expert considered that this situation is even more challenging in the context of increasingly frequent extreme weather events such as droughts, heat waves, precipitation, and floods, which increase political tensions, accelerate migration flows, and reduce agricultural crops and yields[19]. This, in turn, creates additional incentives for food-exporting countries to impose export restrictions, exacerbating the impacts of climate change and risks to global food security[20] [21].

Experts discussed options to improve the monitoring of export restrictions-including through the use of the IFPRI's Export Restriction Tracker, an online tool to monitor export restrictions of agricultural products and fertilizers-and provide information on the duration of these trade-restrictive measures, the

[16] Sinha, T. (2023), *Option for a permanent solution on public stockholding for food security purposes,* https://www.iisd.org/system/files/2023-10/webinar2-tanvi-sinha-the-commonwealth-5-options-permanent-solution-psh.pdf

[17] Bali Ministerial Decision on Public Stockholding for Food Security Purposes (2013), https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:/WT/MIN13/38.pdf&Open=True

[18] Deuss, A., (2023), *Looking at and beyond export restrictions,* https://www.iisd.org/system/files/2023-10/webinar3-annelies-deuss-oecd-overview-export-restriction_0.pdf

[19] Lager, F. (2023), *Climate change, global food security and the role of trade and export restrictions,* https://www.iisd.org/system/files/2023-10/webinar3-frida-lager-sei-climate-change-export-restrictions.pdf

[20] Cascades (2020), *Cascading climate impacts: a new factor in European policy-making,* https://www.cascades.eu/wp-content/uploads/2020/04/CASCADES_Policy_Brief_1_0-4.pdf

[21] Willenbockel, D. (2012), *Extreme weather events and crop price spikes in a changing climate,* https://www-cdn.oxfam.org/s3fs-public/file_attachments/rr-extreme-weather-events-crop-price-spikes-05092012-en_0.pdf

share of restricted products in total country food exports, the country global market share in restricted products, and the share of global exports impacted (in the cases of nitrogen-, potash-, and phosphate-based fertilizers)[22].

Finally, experts discussed the pros and cons of a decision to exempt food purchases by LDCs from agricultural export restrictions (the LDC Exemption). An LDC Exemption would mean that WTO members could refrain from imposing export bans when basic food products are purchased by LDCs for their domestic use only. Experts suggested that LDCs are particularly exposed to export restrictions on food, which would justify WTO members considering an agreement on an LDC exemption. They warned, however, that other variables should also be considered when negotiating an LDC Exemption: LDCs are not always the most exposed to export restrictions (smaller islands are equally if not more exposed to the effects of these trade-restrictive measures), re-exports of food originally intended exclusively for LDCs' domestic use could occur (which could require the consideration of anti-circumvention and traceability mechanisms), and the effectiveness of an LDC exemption to address the food access dimension of food security (i.e., higher prices for food), which in times of crisis has proven to be more relevant than the dimension of food availability. In that regard, experts invited WTO members to support the use of a Global Food Import Financing Facility, as proposed by the Food and Agriculture Organization of the United Nations or the International Monetary Fund's Price Window[23].

[22] IFPRI's Export Restriction Tracker, https://public.tableau.com/app/profile/ifpri.food.security.portal/viz/shared/2CPYTB4G8

[23] Laborde, D. (2023), *Exempting Export Restriction for the LDCs? Pros and Cons,* https://www.iisd.org/system/files/2023-10/webinar3-david-laborde-fao-ldc-exemption.pdf

MORE NEGOTIATION ISSUES ON THE AGENDA

However, domestic support, PSH, and export restrictions are not the only issues on the agriculture agenda. In fact, the WTO agriculture talks span four other negotiation issues as well. These negotiation issues are (i) export competition, which comprises export subsidies; (ii) the special safeguard mechanism (SSM), a trade policy tool that would enable developing economies to temporarily raise tariffs in the event of a sudden import surge or fall in food prices; (iv) market access for agricultural products; and (iv) cotton, which includes but is not limited to the topic of trade-distorting domestic support to cotton farmers. All four of these negotiation issues are tied to broader sustainability concerns.

While some WTO members consider export competition as "unfinished business" and would like to see further improvements under this pillar, most notably on the topic of transparency, most WTO members believe that export competition has largely been settled through the Nairobi Ministerial Decision of 2015. By prohibiting the use of export subsidies, the Nairobi Ministerial Decision on Export Competition levelled the playing field for agricultural exports, which is particularly meaningful for farmers in poor countries who cannot afford to compete with better-off countries that artificially boost their exports through subsidization[24].

[24] https://www.wto.org/english/thewto_e/minist_e/mc10_e/briefing_notes_e/brief_agriculture_e.htm

SSM is discussed in special sessions of the CoASS. Pursuant to the 2015 Nairobi Ministerial Decision, developing countries shall have recourse to an SSM, as envisaged under the 2005 Hong Kong Ministerial Declaration[25]. Despite these ministerial mandates, the lack of engagement among WTO members on SSM has been remarkable. Progress on an SSM for developing countries has stalled due to linkages to market access for agricultural products. Therefore, negotiations could benefit from more focused technical discussions on the various elements of an SSM for developing countries, including price and volume triggers, remedies, and scope (including coverage and treatment of preferential trade).

As with many other topics, this negotiation issue is imbued with broader sustainability concerns. In fact, the most recent submission by the African Group on an SSM for developing countries calls for an SSM for developing countries on these grounds[26]. In its submission, the African Group notes that import surges have caused major challenges for the livelihoods of poor and vulnerable smallholder farmers in developing countries by creating volatility, instability and price declines in local markets and constraining domestic production, thereby threatening the long-term food security of large populations, as well as aggravating poverty and hindering rural development efforts.

Market access is another issue in which, beyond scattered transparency elements such as the treatment of shipments en route, the lack of engagement among WTO members has virtually halted negotiations. As is the case with SSM, proponents of market access tie this issue to broader sustainability concerns. For example, a proposal by Argentina, Brazil, Paraguay, and Uruguay from November 2023 underlines the point that progress on market access has the potential to support efforts in each of the four dimensions of food security: increasing the availability of food, by enabling it to be redistributed from regions with surplus production to regions with a shortfall; its accessibility, by increasing the available supply and drawing on the comparative advantages of other countries and regions in certain products, resulting in cheaper food; its utilization, by providing consumers with the possibility of a more diverse diet; and its stability, by reducing the risk of shortages in domestic markets and mitigating price volatility[27].

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[25] Nairobi Ministerial Decision on the Special Safeguard Mechanism for Developing Country Members (2015), https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:/WT/MIN15/43.pdf&Open=True

[26] WTO (2023), *Special Safeguard for Developing Country Members,* WTO document JOB/AG/205/Rev.1 (restricted)

[27] WTO (2023), *Reform of Agricultural Trade in Terms of Market Access,* WTO document JOB/AG/255, https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:/Jobs/AG/255.pdf&Open=True

With respect to cotton, this negotiation issue is discussed at the WTO under two different workstreams. The first one has to do with trade, including the reduction of trade-distorting domestic support to cotton farmers. The second workstream is related to the development side of cotton, including cotton development assistance. The link between these two and broader sustainability issues, especially food security and the livelihoods of poor farmers in poor countries of West and Central Africa, is a straightforward one. In fact, the Draft Ministerial Decision on Cotton that the C4, a group of cotton-producing and exporting countries of Africa (Benin, Burkina Faso, Chad, and Mali) disseminated ahead of MC13, makes reference to UN General Assembly Resolution A/RES/75/318, which underscores the vital role that cotton plays by providing livelihoods as a subsistence crop for millions of people[28].

FINAL WORDS

As discussed, the linkages between WTO agriculture negotiations and broader sustainability concerns are present under each of the seven issues of the agriculture agenda: domestic support, market access for agricultural products, export competition, cotton, export restrictions, PSH, and the SSM for developing countries.

Interestingly, references to broader sustainability concerns -most notably food security-go beyond the WTO agriculture negotiations taking place within the CoASS. At MC12, for example, ministers instructed the WTO Committee on Agriculture (CoA), the body in charge of the monitoring and notification of agricultural policies, to undertake a dedicated work program to examine ways for the Decision on Measures Concerning the Possible Negative Effects of the Reform Program on LDCs and NFIDCs to be made more effective and operational[29]. Issues addressed under this work program included how to increase the resilience of LDCs and NFIDCs in responding to acute food instability by considering the best possible use of flexibilities to bolster their agricultural production and enhance their domestic food security as needed in an emergency.

[28] WTO (2023), *Negotiations on Cotton at the WTO,* WTO document TN/AG/GEN/53 TN/AG/SCC/GEN/25, https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:/TN/AG/GEN53.pdf&Open=True

[29] Decision on Measures Concerning the Possible Negative Effects of the Reform Programme on LDCs and NFIDCs, https://www.wto.org/english/docs_e/legal_e/35-dag_e.htm

Four big themes were addressed by this work program in the run-up to MC13: access to international food markets, financing of food imports, agricultural production and resilience of LDCs and NFIDCs, and horizontal issues such as cooperation among intergovernmental organizations in various areas, including financing and global market intelligence and surveillance.

Discussions under this work program concluded in November 2023 with the presentation of a draft report by the CoA Chair with key findings and recommendations[30]. With respect to access to international food markets, for instance, the report (which was finally adopted by the CoA in April 2024) underlined the importance of applying export prohibitions or restrictions in accordance with the WTO Agriculture Agreement, as well as voluntarily exploring practical, WTO-consistent means, to lessen the effect of such measures on importing countries, particularly on LDCs and NFIDCs.

While the negotiation of new disciplines on trade in food and agriculture has always been the domain of the CoASS, and the aforementioned report by the CoA Chair is structured around best endeavors or non-binding language, it provides a good overview of what trade policy tools -and eventually what WTO agriculture negotiations can do-to contribute to the sustainability of our food systems through better rules on trade in food and agriculture.

[30] WTO (2023), *Unofficial room document. Work Programme Pursuant to Paragraph 8 of the Ministerial Declaration on the Emergency Response to Food Insecurity,* WTO document RD/AG/120/Rev.1 (restricted)

5

PUBLIC STOCKHOLDING PROGRAMS AND THE WTO

Joseph Glauber

The issue of how support for public stockholding (PSH) programs is calculated and disciplined within the WTO Agreement on Agriculture (AoA) has been a point of contention since 2012. PSH was largely uncontroversial during the Doha negotiations, where issues like the Special Safeguard Mechanism, domestic support, and cotton contributed to the collapse of negotiations in 2008 (Blustein 2009; Jones 2010; Margulis 2023). However, members who raised administered prices to keep up with surging market prices in the late 2000s found themselves facing potential challenges, as support levels for PSH programs threatened to exceed domestic support commitments under the AoA.

At the Ministerial Conference in Bali in 2013 (MC 9), members agreed to an interim mechanism, which granted a "peace clause" to countries with existing PSH programs, effectively shielding them from challenges regarding compliance with domestic support obligations under the WTO Dispute Settlement Mechanism. Under the Bali Decision, members agreed to provide data on how the program operated and to ensure that such programs were not trade distorting or would not affect the food security of other WTO members. PSH remains controversial and members failed to reach agreement on a permanent solution at subsequent Ministerials in Nairobi, Buenos Aires and Geneva. More than 10 years later, failure to reach an agreement on PSH continues to block significant progress in overall negotiations.

Much has been written on the topic, including by Díaz-Bonilla (2013, 2014, 2021), Glauber (2016), ICTSD (2016), Kask (2020), Kondreas and Mermigkas (2014), Matthews (2014) and Montemajor (2014). This paper draws on these papers and on more recent work by Glauber and Sinha (2021), Glauber (2023), Galtier (2023) and Brink and Orden (2023).

BACKGROUND

During the Uruguay Round negotiations, members agreed that PSH programs could be considered as non-trade distorting (and hence exempt from discipline), provided that stock purchases were at current market prices (as opposed to administered prices). Early language of what became the Green Box allowed for PSH programs, as long as "[f]ood purchases by the government ***shall be made at current market prices*** and sales from food security stocks ***shall be made at no less than the current domestic market price*** for the product and quality in question". (GATT 1991, emphasis added). In the end, however, members allowed PSH programs with administered prices to be eligible under Annex 2, paragraph 3 of the Agreement on Agriculture, "***provided that the difference between the acquisition price and the external reference price is accounted for in the AMS***." (WTO 1994, emphasis added).

If the total support for that commodity exceeds de minimis levels, the resulting support is counted towards a member's Current Total Aggregate Measurement of Support (CTAMS)[1]. To be in compliance with domestic support commitments, a member's CTAMS must be below its Bound Total AMS (BTAMS); but only 33 current members have a BTAMS (16 developed countries and 17 developing countries). For members without a BTAMS, the AMS must not exceed de minimis levels (Brink and Orden 2023).

Under the provisions of Annex 3 of the Agreement on Agriculture, market price support is calculated as the gap between a fixed external reference price and the administered price, multiplied by the quantity of eligible production.

Market Price Support = (Administered Price – Fixed External Reference Price) x Eligible Production

[1] The de *minimis* threshold differs by economic status. For developed countries the de *minimis* threshold is equal to 5% of the value of agricultural production. For developing countries, the de *minimis* threshold is 10%. As part of their accession agreements to the WTO, China and Kazakhstan agreed to a de *minimis* threshold of 8.5%.

For most countries, the fixed external reference price (FERP) is based on a 3-year average price between the years 1986-1988[2].

The 1986-88 reference price remained a relevant benchmark price throughout most of the 1990s and early 2000s (Figure 5.1). Sometimes prices were above the reference period and sometimes below. Starting in the mid-2000s, global prices began rising due to a number of factors, including growth of biofuels, growth in animal consumption (and animal feeds), and increased energy prices driven by global economic growth. By 2012, prices for many agricultural products were at nominal record levels; and while prices declined over 2013-2019, they remained at 50-100% of the 1986-88 base period. More recently, prices again hit record levels following the Russian invasion of Ukraine. Average monthly price levels for wheat, rice and corn (maize) since January 2005 have been over twice the average level during the 1986-88 base period.

FIGURE 5.1 ▶ Price rises relative to the 1986-1988 base period

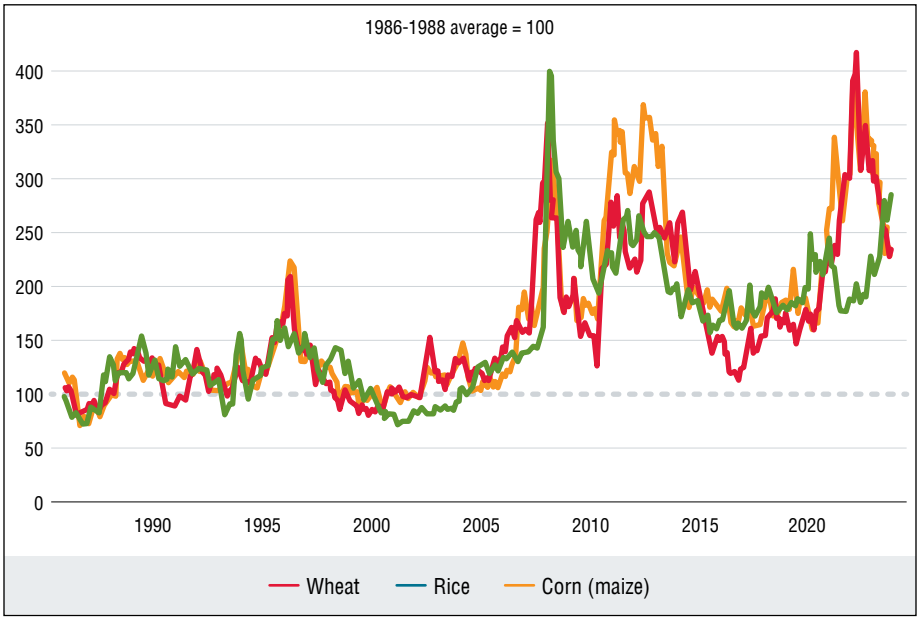
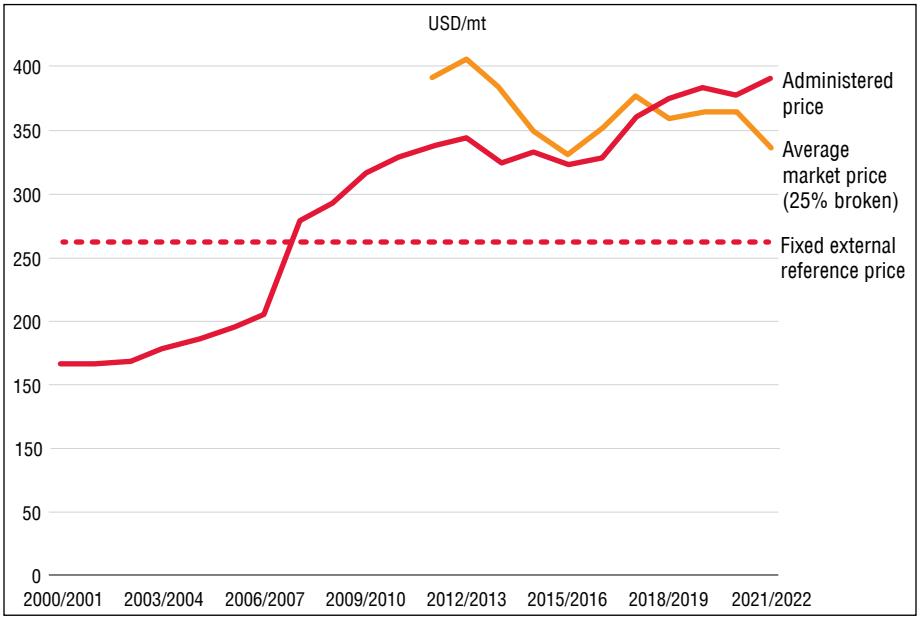


Chart: Joseph Glauber • Source: Worl Bank Pink Sheet.

[2] Some countries which joined the WTO more recently use a more recent base period to calculate the fixed external reference price. For a particular commodity, the fixed external reference prices are accounted as the average 'free on board' (f.o.b.) unit value in a net exporting country, and the average 'customs, insurance and freight' inclusive (c.i.f) unit value in a net importing country in the base period.

As market prices rose, countries raised administered prices for PSH programs. For example, until 2007/08, India's administered price for rice remained well below the fixed external price based on the 1986-88 base period (USD 262.51/mt) (Figure 5.2). Rice prices almost tripled in 2007/08, and India responded by raising its administered price 35% (from USD 205.92/mt to USD 277.57/mt). By 2012/13, India's administered price for rice was USD 344.67/mt, 31% above the fixed external reference price but below the average market price[3].

FIGURE 5.2 India's administered price for rice



PSH price data taken from India's DS 1 notifications to WTO. India market price data from FAO Rice Update report (simple average of monthly prices over October to September marketing year).

Chart: Joseph Glauber • Source: Agriculture Information Management System.

[3] Rice prices were taken from the FAO Rice Price Update report and were calculated as a simple average of India's white rice price (25% broken) over the October-September marketing year. Limited price data was available prior to the 2011/12 marketing year.

[4] In its 2018 notification to the WTO, under Article 18.7 of the Agreement on Agriculture, the United States claimed that India's market price support for wheat and rice had exceeded de minimis levels for the years 2010/11 through 2013/2014 (WTO 2018).

As the gap widened between the administered price and the fixed external reference price, support levels began to approach de *minimis* levels, threatening to put India out of compliance with its domestic support obligations[4].

THE BALI DECISION

The issue became one of urgency at the 9th Ministerial Conference in Bali in 2013. In 2012, the Group of 33 (G-33) introduced a proposal prior to the Bali Ministerial Conference, which would have excluded expenditures for public stockholding purposes from AMS calculations, effectively putting programs supporting low-income or resource-poor producers in the Green Box (WTO 2012). Members rejected the G-33 call for exempting PSH support altogether, but in the end, agreed to an interim mechanism until a permanent solution received consensus of the membership by the eleventh ministerial conference[5].

The so-called Bali Decision essentially adopted a 'peace clause' whereby the concerned member would be shielded from challenges made through the WTO Dispute Settlement Mechanism regarding compliance with its obligations under Articles 6.3 (AMS limits) and 7.2(b) (de minimis limits) of the Agreement on Agriculture . The support concerned traditional staple food crops in public stockholding programs for food security purposes, as long as this complied with relevant provisions of Annex 2 of the Agreement on Agriculture. The Decision highlighted the fact that the permanent solution would be applicable to all developing countries, subject to certain conditions that include:

- Notification to the Committee on Agriculture that the member is providing support in excess of its AMS or de *minimis* limits for a particular commodity;

[4] In its 2018 notification to the WTO, under Article 18.7 of the Agreement on Agriculture, the United States claimed that India's market price support for wheat and rice had exceeded de minimis levels for the years 2010/11 through 2013/2014 (WTO 2018).

[5] As WTO ministerial conferences are normally held every two years, members expected a permanent solution to be reached at the 2017 ministerial conference, which was convened in Buenos Aires in December 2017 (MC11). However, no agreement was reached at MC11 nor at MC12, convened in Geneva in June 2022.

- Full compliance with domestic support notifications requirements under the Agreement on Agriculture, and in accordance with notification requirements and formats;
- Provision of additional information for each program through the template contained in the annex to the Decision;
- Provision of statistical information (per commodity) as described in the Statistical Appendix to the Annex of the Decision.

Under provisions dealing with anti-circumvention and safeguards, the Bali Decision required governments to ensure that such programs were not trade distorting and would not affect the food security of other WTO members. Additionally, a member benefiting from the Decision would be required to hold consultations (upon request) with other governments on the operation of the concerned programs.

A General Council decision in 2014 declared that the interim solution would remain in effect until a permanent solution could be found (WTO 2014), but a permanent solution has proven elusive. Members failed to reach consensus on the issue at the Eleventh Ministerial Conference in Buenos Aires in December 2017 and at the Twelfth Ministerial Conference in Geneva in June 2022.

To date, only India has used the exemption provided by the Bali Decision in regard to its PSH programs (WTO 2022a). In its notification concerning domestic support commitments for the 2021/22 reporting year (G/AG/N/INDF/29), India notified the Committee on Agriculture that it had exceeded the de *minimis* limit specified under Article 7.2(b) of the Agreement on Agriculture (AoA) for rice (WTO 2023). India said that the breach of the de *minimis* limits for rice was covered by the peace clause set out in the Bali Ministerial Decision on Public Stockholding for Food Security Purposes (WT/MIN (13)/38) and by the General Council Decision (WT/L/939).

ECONOMICS OF PSH

Concerns over PSH programs have focused on the underlying support provided to production and on the programs' potential to distort production and trade. PSH programs affect market prices by removing staples from the market that normally would be consumed or stored by private inventory holders (for example, processors). PSH programs are clearly distorting when

the administered price is higher than the expected market price. Such a program ensures that the government stands ready to purchase grain up to the level of the administered price (subject to any cap on total purchases into the reserve). Purchasing grain into the reserve raises market prices, which gives an incentive for producers to plant more grain than they would in the absence of a PSH program.

Yet, administered prices do not need to be above market prices for a PSH program to distort production decisions. Consider a PSH program where the administered price is less than the expected market price, but since the market price is unknown, there is some probability that the market price will fall below the administered price at harvest. Glauber and Sinha (2022) discuss the simple example of a producer who is considering planting a crop that has a 50 percent probability of paying $100 per ton and a 50 percent probability of paying $200 per ton. The expected price is simply the price outcome weighted by the probability of occurrence, or $150 per ton (0.5 x 100 + 0.5 x 200). Now consider the introduction of a public stockholding scheme that announces that it will purchase the crop at an administered price of $140 per ton. While the administered price is below the expected price in the absence of such a scheme, it nonetheless provides a floor for prices whenever the price is under $140. The expected price under such a scheme would be $170 per ton (0.5x140 + 0.5x200 = 170), which means, that on average, the producer will receive $20 per ton more under the administered price scheme. Thus, an administered price scheme can provide support even if the actual administered price is below the expected market price, as long as there is some probability of prices following below the administered price in the absence of the scheme.

PSH programs can have positive effects on market prices, *even when purchases are made at market prices*. Galtier (2023) correctly points out that when a government is purchasing large quantities on the domestic market, it is likely to generate an increase that will benefit producers, whether the price is administered or not.

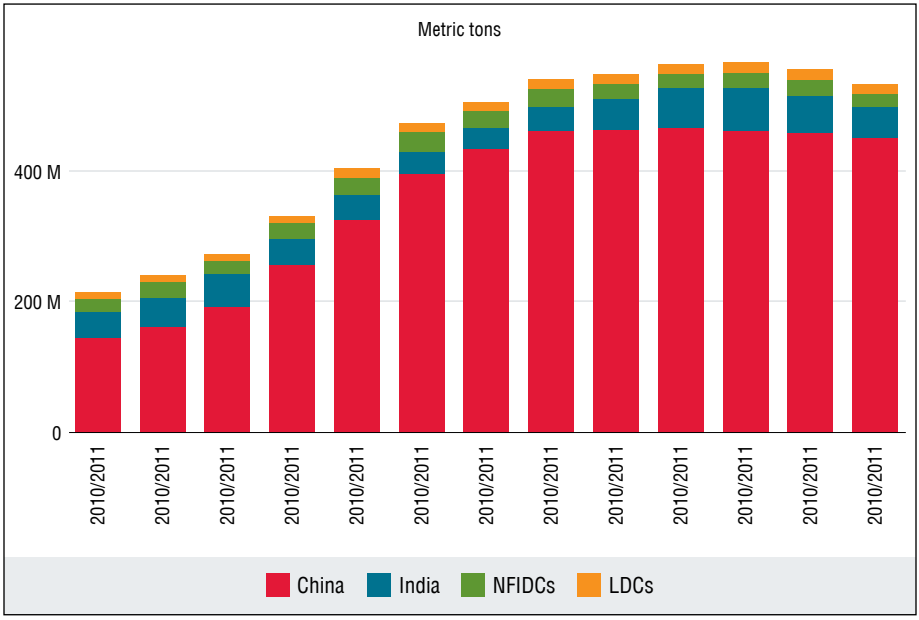
By raising market prices, PSH programs provide price support to all domestic production-not just the amount acquired by the government. Galtier (2023) differentiates between production acquired by the PSH authority, production sold on the domestic market and self-consumption and argues that self-consumption should be excluded from price support calculations. Nonetheless, from an economic standpoint, the value of what is consumed at home reflects the opportunity cost of selling the grain and thus captures any price distortions caused by the PSH program.

PSH PROGRAMS

A 2018 report by the FAO points out that while several countries had reduced or eliminated public stockholding programs following structural adjustment measures and market liberalization in the 1980s and 1990s, PSH programs regained momentum following the food price spikes of 2007/08 (FAO 2018). More recently, stocks have again been an issue during the market uncertainty caused by the COVID-19 pandemic and the war in Ukraine (Glauber 2023).

According to US Department of Agriculture estimates, wheat, rice and corn (maize) stocks held by China and India totaled almost 500 million metric tons and accounted for almost two-thirds of global grain stocks in 2022/23 (Figure 5.3). By contrast, combined grain stocks held by Net Food Importing Developing Countries (NFIDCs) and Least Developed Countries (LDCs) held less than 5% of global grain stocks.

FIGURE 5.3 Existencias de cereales en poder de los PDINPA y los PMA, en comparación con las existencias en poder de China y la India



Maize, rice and wheat.

Chart: Joseph Glauber • Source: US Department of Agriculture, Foreign Agricultural Service, PSD database, 12 July 2023.

Table 5.1 presents characteristics of selected PSH programs for which members have reported market price support and expenditures under Annex 2, Paragraph 3 in recent years (WTO 2022a). Data for exports and stocks reflect 3-year average levels calculated over the 2020/21 to 2022/23 marketing years (USDA 2024). China's stocks for wheat, rice and corn (maize) are quite large compared to other programs, accounting for over 75% of China's production of corn and rice, and over 100% of wheat. Perhaps even more striking is that they averaged between 50% and 69% of global stocks over the period. India's stocks of wheat and rice as a percent of domestic production averaged about 17.7% and 27.2%, respectively. As a share of global stocks, rice accounted for about 19%, while its wheat stocks averaged less than 7% of global wheat stocks. As a share of global rice stocks, stocks held by Philippines and Indonesia averaged less than 2% of global rice stocks.

Table 5.1 ▶ Characteristics of selected PSH programmes

	Percentage			
Country/ commodity	**Exports as share of global exports**	**Exports as share of domestic production**	**Stocks as share of global stocks**	**Stocks as share of domestic production**
China corn	0.0	0.0	68.7	76.6
China rice	3.7	1.4	61.5	75.8
China wheat	0.4	0.6	50.0	101.4
India rice	38.4	16.0	19.4	27.2
India wheat	2.5	5.0	6.8	17.7
Indonesia rice	0.0	0.0	1.9	13.7
Philippines rice	0.0	0.0	1.6	23.8

Shares based on 3-year average over 2020/21-2022/23 marketing years.

Chart: Joseph Glauber • Source: USDA PSD database, 12 January 2024.

India's PSH program for rice stands out because, unlike for the other PSH programs, exports are quite large, both as a share of domestic production (16%), and in particular, as a share of global exports (38.4%). India's rice production and exports have increased markedly since 2012/13. Between 2012/13 and 2022/23, Indian rice exports increased by 86%, an annual average increase of over 6% per year[7].

[7] The importance of India as the world's largest rice exporter came into sharp focus in 2023 when the Indian government implemented bans and duties on rice exports that affected more than 50% of its exports (Glauber and Mamun 2023a). This action contributed to the sharp increase in global rice prices in late 2023 (Glauber and Mamun 2023b).

PROPOSALS FOR A PERMANENT SOLUTION TO PSH

There have been numerous proposals that would offer a permanent solution to PSH programs[8]. Most proposals fall under two broad approaches: exempting PSH expenditures from AMS altogether or adjusting the current formula for calculating market price support.

While the 2012 G-33 would have extended an exemption for support for PSH programs to all developing countries, Glauber and Sinha (2019) and Wolff and Glauber (2023) proposed that exemption of support for PSH programs be limited to LDCs. As discussed in the previous section, LDCs hold a small share of global stocks and stocks are typically held for emergency humanitarian needs (FAO 2018). A proposal by Brazil during MC12 (WTO 2022b) would exempt support for PSH for LDCs, and for certain NFIDCs and developing countries requiring external food assistance, if exports were less than 2% of global exports and stocks were less than 5% of production. Brazil's proposal would thus preclude countries that operate PSH programs, but that are also large exporters, from exempting market price support connected to the operation of the PSH program. Exempting LDCs and NFIDCs from reporting market price support as part of their AMS for PSH programs would potentially affect only a small share of global grain stocks and hence would be expected to have only small impacts on global markets.

Most proposals that have considered changes to how market price support is calculated have focused on an update of the FERP. For example, proposals by the African Group, the ACP and G33 (WTO 2023b), Brink and Orden (2023) and Galtier (2023) would replace the FERP with a reference price based on a moving 5-year Olympic average[9]. The argument is that a moving average of recent prices would be more reflective of the underlying market price and hence a more accurate measure of market price support provided by the administered price.

[8] Many of these proposals are discussed by ICTSD (2016), Kask (2020), Glauber and Sinha (2021), Brink and Orden (2023) and Galtier (2023).

[9] An Olympic average discards the highest and lowest value in the sample when calculating the average.

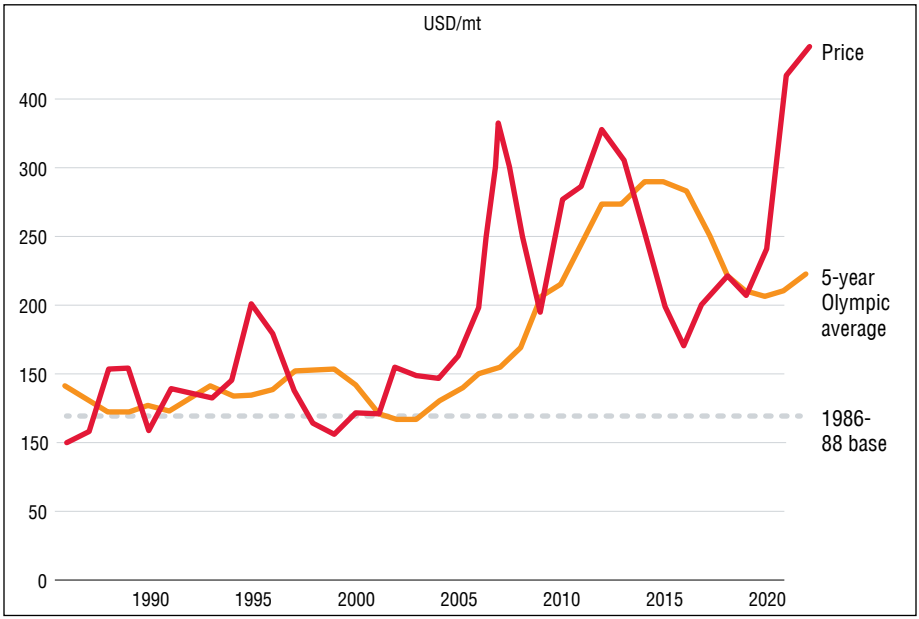
During the Uruguay Round negotiations, various formulas for determining the external reference price were debated. As late as 1990, updates to the fixed external reference price were considered. The *Draft Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations* of December 3, 1990 (GATT 1990b) stated that:

> The AMS will be expressed by total monetary value per commodity using the base year 1988 and a fixed reference price based on 1986-88 data. It will be applied for a negotiated period. The ***fixed reference price may be subject to periodic reassessment*** [emphasis added].

Brink and Orden (2023) point to the fact that while the Agreement on Agriculture specified the 1986-88 base price for determining the FERP, countries acceding to the WTO in later years (such as China and the Russian Federation) used an updated base period for determining their levels of support. They also point to Article 18.4 of the Agreement on Agriculture that directs the Committee on Agriculture to give "due consideration to the influence of excessive rates of inflation on the ability of any Member to abide by its domestic support commitments." (WTO 1994).

Updating the external reference price (ERP) is not without controversy. Agricultural prices are highly variable and updating the ERP based on a moving average of past prices could result in an ERP far higher than current prices. Figure 5.4 shows an ERP based on a moving 5-year Olympic average of past wheat prices relative to current wheat prices over the past 25 years. Over the period 1995 to 2022, market prices would have exceeded the 5-year Olympic average 60% of the time and been below the ERP 40% of the time. Consider a PSH program that sets the administered price equal to the ERP. In years following a period of low prices, the ERP would remain low when prices started to rise. For example, in 2007, the ERP would have been 54% below market prices (by comparison, the current FERP based on the 1986-88 period is 57 percent below the wheat price for December 2023).

FIGURE 5.4 Existencias de cereales en poder de los PDINPA y los PMA, en comparación con las existencias en poder de China y la India



US Gulf HRW. Olympic average = five-year average of preceding years, excluding the highest and lowest values.

Chart: Joseph Glauber • Source: USDA/ERS.

However, volatility in market prices means that there could be large outlays in years when the ERP based on a 5-year Olympic average was above the current market price. For example, wheat prices rose steadily over the period 2009 to 2013, but by 2016 wheat prices had collapsed to almost 50% of 2012 levels. An ERP based on a 5-year Olympic average, however, would reflect the high past prices. In this case, the ERP in 2016 would have been 68% higher than the market price that year. A PSH program setting its administered price equal to the ERP in 2016 would report zero market price support that year[10].

Another issue is whether updating the formula for establishing the ERP should apply towards all market price support calculations or be restricted

[10] Kask (2020) points out that the administered price could be set even higher than the ERP and market price support could remain below de *minimis* levels. Assuming all production is considered eligible for price support, the administered price, AP, could be set so that AP < ERP + 0.1 P, where P is the market price used for determining the value of production that year. Such support would fall short of de *minimis* levels. On a practical level, this would be difficult since the market price P is not known until after the marketing year has concluded.

just to calculating market price support for purposes of PSH programs (specifically, footnote 5 of Annex 2, Paragraph 3). Brink and Orden (2023) point out that measurement of market price support is not restricted to PSH, as many members use price support as a mechanism for supporting farmers. However, updating the FERP for all market price support would likely be more controversial, since it would have consequences for price support in developed countries (for example, US sugar producers or EU dairy producers) and could lead to an increase in policy space relative to current bindings (which were established based on the 1986-88 base period).

Some have advocated for restricting price support calculations for PSH purposes to the amount purchased by the PSH program (as opposed to all production) (WTO 2022b). Advocates for this approach point to the Korea Beef dispute where eligible production for price support was examined. The panel in that dispute considered eligible production to be marketable production "even though the amount of production purchased by a government is small or even nil." (WTO 2000a, cited in Brink and Orden 2023, p. 154)[11]. The Appellate Body modified the ruling and concluded that eligible production was production "fit or entitled" to be purchased (WTO 2000b). The Appellate Body reasoned that the government is able to define and limit eligible production (Brink and Orden 2023). As discussed above, most economists agree that price support provides support to all production, not just that acquired under PSH schemes (Glauber and Sinha 2021; Brink and Orden 2023; Galtier 2023).

Lastly, some have called for addressing the PSH in the broader context of domestic support reform (Ungphakorn 2024). For example, the Cairns Group has proposed sweeping changes in the domestic support disciplines that would cap overall trade distorting support, which it argues would obviate the need for new disciplines on PSH (WTO 2023). The proposal has met with opposition from groups such as the G33, which have pushed for separate measures on PSH (Ungphakorn 2023).

[11] The panel in *China – Agricultural Producers* established that eligible production for wheat and rice was the amount produced, not the amount purchased, because China had set no limits on the quantities eligible for the support price (See Ahn and Orden 2021).

FINAL THOUGHTS

The current impasse over PSH continues to stymie trade negotiators in Geneva. A technical fix to update the external reference price is arguably well overdue. Replacing the current FERP to an external reference price based on a moving 5-year Olympic average would be an imperfect, but a more accurate measure of current price support afforded by administered prices. But concerns over the impacts of PSH programs on production and exports remain. Exempting such support from challenge may be less consequential for LDCs and NFIDCs, who hold relatively small stocks and export negligible amounts on world markets. Exempting countries with large stockpiles and significant export market shares is far more problematic (see India's increase in rice production and exports since 2012). PSH programs should remain at most minimally production and trade distorting. Trade-distorting support, however measured, should be disciplined under the domestic support provisions of the Agreement on Agriculture.

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6

TRANSFORMING AGRICULTURAL SUPPORT FOR A SUSTAINABLE FUTURE: A LATIN AMERICA AND CARIBBEAN VIEW[1]

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[1] This chapter is based on Laborde, D., E. Olivetti and V. Piñeiro. Redirecting Agricultural Subsidies to Achieve Global Sustainability Goals. International Food Policy Institute. Forthcoming.

INTRODUCTION

Addressing the complex challenges facing agricultural and food systems requires a detailed and integrated approach that ensures food security, enhances nutrition, protects environmental sustainability, and supports livelihoods. Governments are crucial in guiding this transformation through a range of policy tools, including regulatory measures, market-based mechanisms, price adjustments that reflect true production costs, and the reassessment of agricultural subsidies. Achieving comprehensive solutions to these challenges across the domains of food security, nutrition, and sustainable development hinges on reforming domestic agricultural support.

HISTORICAL CONTEXT

The Uruguay Round Agreement on Agriculture (AoA) achieved a significant milestone by integrating agriculture into a system of multilateral rules and disciplines with a focus on governing domestic agricultural support. This agreement capped domestic support based on historical levels (with the Amber Box) and encouraged Members to reform support towards minimally production- and trade-distorting measures (with the Green Box) as outlined in Annex 2 (Glauber, 2022). The immediate effect prompted reforms among Members, leading to a decline in average producer support estimates among OECD countries from 36.4 percent of the gross farm receipts in 1986 to 19 percent in 2010 OECD (2023).

To measure support, subsidies considered to have a more than minimally production- and trade-distorting effects (those under the Amber Box) are converted into the Aggregated Measurement of Support (AMS) with the methodology outlined in Annex 4. Product-specific and non-product specific subsidies undergo a “de minimis” test: if the level of support is below a specific share of the current production value, the support is considered as “de minimis” and is excluded from the total AMS calculation (“de minimis” threshold of 5% for developed countries, 10% for developing countries).

Under the AoA, countries reporting support levels exceeding the “de minimis” levels at the beginning of the post-Uruguay Round Reform period (1986-1988, also referred as “base period”) are bound by a domestic support reduction commitment: they committed to bind their total AMS at their level

during the base period and reduced further by a defined percentage (for developed countries, by 20 percent over 6 years; for developing countries, by 13 percent over 10 years – cf. Part IV of Schedule and Article 6.3). Subsidies in countries without domestic support reduction commitments are constrained by "de minimis" levels. Additionally, there are some exemptions to reduction commitments under the Development Box and the Blue Box. As specified in article 6.2, the Development Box exempts developing countries from reduction commitments for direct and indirect support measures promoting agricultural and rural development (including input subsidies). The Blue Box exempts "production limiting programs" from reduction commitments, defined in article 6.5, as programs where the payments are based on fixed areas and yields, or a fixed number of livestock.

CHALLENGES AND STAGNATION

Since 2008, reforms among OECD countries have largely stalled, and support levels have increased due to trade wars and the impact of COVID-19. Large emerging economies like China and India have also witnessed a surge in support levels (Mamun, 2020). Worse, current provisions under the AoA give ample leeway for the provision of trade-distorting support. Costa Rica estimated that "potential expenditures on-trade distorting domestic support" exceed USD 910 billion annually (cf. JOB/AG/243, WTO 2023), with 80% of these expenditures coming from just 10 members.

The AoA has been criticized for including exemptions to reduction commitments (cf. Blue Box, Green Box and Development Box), and failing to create a level playing field across countries and commodities. Notably, countries bound by domestic support reduction commitments (cf. Article 6.3) are afforded the latitude to provide support exceeding the "de minimis" threshold imposed on other members. This disparity not only enables them to provide elevated

levels of support overall but also facilitates the allocation of significantly higher support levels to specific commodities (97% of support provided under article 6.3 was product-specific according to JOB/AG/245). Product-specific support for key commodities (rice, cotton, wheat, corn/maize, and bovine) is concentrated among a few WTO Members, with two or three of these members accounting for between 80 and 90% of product-specific support, depending on the commodity. Worse, the Members providing substantial product-specific support for these commodities are often significant global producers and/or exporters of the respective commodity (JOB/AG/245).

Criticism of support under the "de minimis" thresholds is mounting as it is related to the global value of production, resulting in a notable increase as the global value of production rises (cf. JOB/AG/243). Global de minimis entitlements have indeed surged from around USD 182.4 billion in 2001 to USD 631.8 billion in 2019 (JOB/AG/245).

Finally, green support is increasingly under scrutiny particularly as it constituted more than 75% of total domestic support in 2019, with its distribution heavily concentrated among a select few countries (5 members provided over 90% of total green support according to JOB/AG/253 and JOB/AG/253/Rev.1). Notably, green box support has surged by 117% from 2000 to 2019 (as measured in 2019 US dollars) in contrast to a 50% increase for "de minimis" support, a 63% rise for blue box support, a 40% growth for the current total aggregate measure of support, and a marginal 3% increase for Development Box support.

CURRENT LANDSCAPE AND PROPOSALS

The surge in agriculture support in recent years prompted calls to reduce and harmonize domestic support measures under the AoA. WTO members have submitted proposals aiming at sharply reducing and eliminating AMS entitlements (JOB/AG/216/Rev.1 and JOB/AG/242/Rev.1). Most proposals advocate for the harmonization of current support by introducing restrictions on the blue box (cf. JOB/AG/242/Rev.1 that would limit support levels at 2.5% of the value of production for a given product), the development box (cf. JOB/AG/195), and the green box (cf. JOB/AG/243/Rev.1 and JOB/AG/243/Rev.2 that advocate for a review and an update of the criteria set out in Annex 2, and JOB/AG/242/Rev.1 that propose that the total support within

certain categories under the Green Box should not exceed 5% of the value of production).

Some members also advocate for introducing product-specific caps to prevent concentrating domestic support in a handful of commodities. For instance, JOB/AG/243/Rev.1 and JOB/AG/243/Rev.2 proposed a limit measured as a share of the product's total value of production, which would become more stringent the more the member actively engages in the exports of the given product.

Recently, Costa Rica put forth a new comprehensive approach to domestic support, which involves reducing all trade-distorting support. The "potential expenditure on trade-distorting domestic support" (cf. JOB/AG/243) would be used to determine the cap for each country. The cap would therefore extend beyond the AMS to encompass all forms of trade-distorting domestic support, including support under the Blue Box, Development Box, and de minimis entitlements. The individual caps would then be reduced so that the total cap (the sum of all individual caps) undergoes a minimum 50% reduction by 2035. The reduction would be proportional to the size of the individual cap within the total cap. This approach has gained traction and is supported by the Cairns Group and Ukraine (cf. JOB/AG/243/Rev.1 and JOB/AG/243/Rev.2). This approach would be in line with repurposing as it aims to greatly reduce trade-distorting support, thereby encouraging members to implement green box support.

LOOKING FORWARD

As we look to the future of agricultural support policy, it is important to consider evolving challenges and emerging opportunities. Key considerations should include the integration of climate-smart agricultural practices (Glauber, 2022), promotion of digital technologies for sustainable farming, and the equitable distribution of benefits across diverse economies. Additionally, addressing the unique needs of smallholder farmers, enhancing food system resilience, and fostering international cooperation will be key in shaping a sustainable and inclusive global agricultural landscape.

THE IMPACTS OF AGRICULTURAL SUBSIDIES

Globally, agricultural support amounts to USD 630 billion annually (average value over 2013-2018), half of which is provided through subsidies. Agricultural subsidies have adverse economic repercussions by generating deadweight economic losses and distorting trade, undermining the efficient use of countries' comparative advantages. Worse, agricultural producers in affluent countries tend to receive high levels of subsidies, while those in least-developed countries continue to be taxed, hindering their ability to compete. Additionally, agricultural subsidies not only directly affect food security and nutrition by influencing both the quantity and price of nutritious food, but also indirectly impact farmers' income, thereby potentially impeding their access to food. Finally, agricultural subsidies have environmental repercussions since they influence how much is produced, where it is produced (the environmental outcomes of agricultural production differing among countries due to differences in natural endowments, the productivity of the agricultural sector), what is produced (commodities have varying emission intensities) and how it is produced (production processing having different environmental consequences) (Mamun, 2020). Given the complex and multifaceted effects of agricultural subsidies, the impact of their removal on economic, environmental, and food security outcomes remains an open empirical question.

REVIEW OF PREVIOUS MODELLING ON THE EFFECTS OF REPURPOSING AGRICULTURAL SUBSIDIES

Numerous studies have delved into the repercussions of eliminating agricultural subsidies, with a consistent focus on potential adverse outcomes. Laborde *et al.* (2021) employed the static version of the world Computable General Equilibrium (CGE) model MIRAGRODEP to scrutinize the worldwide

removal of coupled producer payments. Their analysis revealed suggested that such removal would decrease agricultural GHG emissions by 0.6%, but also reduce global farm output by 0.9%. This disparity was attributed to a lesser decline in the production of emission-intensive products such as beef and dairy (declining by 0.7% and 0.6%, respectively) and the relocation of production to regions with higher emission intensities.

Building on this analysis, FAO, UNDP, and UNEP (2021) expanded their investigation to encompass poverty and food security outcomes using the dynamic version of CGE model MIRAGRODEP. Simulating a global removal of all fiscal subsidies, including output, input, and factor of production subsidies, they projected a decrease in agricultural production. Crop production was estimated to decline by 1.6% in 2030, while livestock production would decrease by 0.46%. This reduction would lead to a decline in agricultural land by 0.17% and an increase in forestland by 0.02%. Despite a slight decrease in emissions by 11.3 million tons of CO2eq by 2030, the elimination of agricultural subsidies would have adverse outcomes on poverty, food security, and nutrition. Farm income would fall by 5.7% in 2030, exacerbating extreme poverty, particularly in developing countries, and increasing undernourishment prevalence.

In a similar way, Gautam *et al*. (2022) examined the impacts of removing subsidies along with all other support across all countries simultaneously using MIRAGRODEP. They forecasted a reduction in crop production by 1.3% and in livestock production by 0.5% by 2040, accompanied by mixed economic outcomes. Despite a slight increase in real work income by 0.05%, farm income would decline significantly by 4.5%. Adverse consequences on poverty and nutrition were also anticipated, with an increase in extreme poverty by 0.01% and a rise in healthy food prices by 1.7%. However, there would be a limited but favorable outcome on climate, with a reduction in emissions by 103 million tons of CO2eq by 2040.

Guerrero *et al*. (2022)analyzed the potential of agricultural policy reforms to mitigate the adverse effects of climate change on agriculture. Simulating an elimination of coupled support policies with the partial equilibrium model GLOBIOM, they found a reduction in crop and livestock production by 0.5% and 0.4%, respectively, in 2050. This policy scenario would also decrease cumulative AFOLU GHG emissions by 124 Mt CO2eq over 2010-2050. However, it would lead to an increase in the prevalence of undernourishment.

Springmann and Freund (2022) explored policy scenarios aligning agricultural subsidies with health, climate change, and economic objectives using the CGE model MAGNET. Their analysis highlighted the potential economic and

environmental benefits of removing producer payments, with a 0.3% reduction in total food-related emissions. Nonetheless, adverse health consequences were projected due to decreased agricultural production, particularly for fruits, vegetables, and grains, leading to a decline in total energy intake and consumption of fruits and vegetables and an increase in diet-related mortality.

Cao *et al*. (2023) investigated the relationship between global agricultural and food support reforms, agricultural emissions, and food security using the CGE model GTEM. They found that removing agricultural subsidies worldwide would have some economic benefits, particularly in high-income countries, but adverse impacts on food security, resulting from a decline in crop and livestock productions, increased food consumer prices, and decreased food consumption. Nevertheless, removing agricultural subsidies would have a positive environmental outcome with a reduction in agricultural emissions by 1.6% in 2050, driven mostly by a decline in emissions from livestock production.

Finally, Valin *et al*. (2023) examined various global policy reform scenarios that could reduce GHG emissions from agriculture by redirecting government budgetary transfers to the agricultural sector. Their findings indicated a decline in agricultural emissions and agricultural land but negative impacts on food security and livelihoods. Repurposing agricultural subsidies thus entails significant adverse trade-offs, although it may have positive environmental outcomes.

Results from the literature suggest that repurposing agricultural subsidies toward sustainable intensification and innovation could comprehensively address the multifaceted challenges facing global food systems. Gautam *et al*. (2022) modeled repurposing current budgetary support towards higher public spending on R&D and incentives for green innovations, yielding significant positive outcomes for the environment, poverty reduction, nutrition, and the overall economy. Valin *et al*. (2023) examined several repurposing scenarios that would redirect parts of the budgetary support towards innovation and productivity growth or investments targeting emission abatement technologies, finding that targeted investments could effectively decrease emissions without negatively impacting food provision

and farm production. However, concerted international action is crucial for maximizing the benefits of repurposing agricultural subsidies, with coordinated approaches yielding more equitable outcomes across regions and sectors.

FACTORS ACCOUNTING FOR THE DIFFERENT RESULTS

Although the trade-offs highlighted in the various analyses are consistent, the magnitude of the challenges differs. This is partly due to differences in the modelling approaches. Guerrero *et al.* (2022) use the partial equilibrium model GLOBIOM, while the other studies use a CGE model. Some assessments are done with the static version of the model (Valin *et al.*, 2023 and Laborde *et al.*, 2021), and different time horizons are considered among dynamic analyses. Different modeling approaches may lead to different outcomes due to variations in the adjustment mechanisms implemented by each approach.

Furthermore, different support databases are used. While some studies rely on the GTAP database that embeds information on subsidy rates, other modeling work has adjusted those rates to align with alternative data sources. For instance, Valin, *et al* (2023) use the OECD PSE database to precisely model subsidies. This results in differences in the total number of subsidies removed. With GTAP, the total amount of positive transfers to production factors and output in the agricultural sector is only USD 156 billion in 2017, while it amounts to USD 232 billion with the OECD PSE database.

Also, different studies may have varying scopes of subsidies being removed. For example, in the study conducted by Guerrero *et al.* in 2020, only commodity-specific transfers (other than market price support) are suppressed. Input payments are therefore not included in the suppression, resulting in a total removal of USD 28 billion instead of USD 150 billion for total coupled support. Cao *et al.* (2023) removed only domestic support for the agricultural sector and did not include subsidies provided to food manufacturing.

Finally, different assumption made in the repurposing scenarios of these studies have a major impact on the results. For instance, Cao *et al* (2023) assume land use is fixed between the baseline and the reform scenario in each region (no variations in deforestation due to the repurposing scenario).

IMPACTS OF REALLOCATING AGRICULTURAL SUPPORT: POLICY SCENARIOS

This chapter employs MIRAGRODEP to analyse the impact of reducing and removing trade-distorting domestic support within the framework of the WTO's agricultural negotiations. We develop two policy scenarios to see the effects of eliminating distortions both at the national and global levels on food security, nutrition, and climate outcomes.

Baseline

The baseline was developed using projections from the latest United Nations demographic data (UNDESA, 2022) and the 2023 International Monetary Fund economic growth estimates (IMF, 2023). This approach updates the 2017 GTAP base year values to reflect the policy scenario years (2024–2028) and estimates outcomes up to 2035.

Policy Scenarios Implemented

Scenario 1: Harmonization of Agricultural Support Within National Borders. This scenario aims to create a level playing field across products, as current agricultural support is highly biased towards certain commodities. Support is reallocated such that all commodities in each country receive the same level of support equal to the average rate in each specific country.

Scenario 2: Harmonization of Agricultural Support Across National Borders. This scenario addresses global inequality by leveling the playing field both across products and countries. In this bold scenario, countries with historically higher levels of agricultural support relative to the global average make financial transfers to those with lower support levels. To enhance political feasibility, countries previously below the global average in support do not contribute to these transfers, while non-contributing countries with higher support levels provide financial transfers to consumers[2].

[2] Note that China, Russia, and Mexico, would not be required to contribute to these financial transfers.

METHOD

The MIRAGRODEP model is a sophisticated multi-region, multisector computable general equilibrium (CGE) model, building on the MIRAGE model, to analyse global economic and trade relations. It captures international trade in goods, services, and capital flows, providing a detailed and comprehensive representation of economic interactions. The model includes environmental considerations and can assess the impact of various economic shocks on households, such as income, purchasing power, poverty, food security, and nutrition. It utilizes a recursive dynamic framework for capital accumulation, integrating GTAP11 data, which contains world macroeconomic accounts and trade flows for 141 countries and 65 sectors for the year 2017.

On the supply side, the model uses a Leontief function for production, with intermediate inputs modelled through a constant elasticity of substitution (CES) function. The demand side features a representative agent with a linear expenditure system-constant elasticity of substitution (LES-CES) utility function, capturing income elasticities of demand for goods. This setup allows the model to simulate trade patterns accurately and evaluate the effects of economic changes on production, consumption, and income distribution (Bouet *et al*, 2021).

MIRAGRODEP operates under four main assumptions regarding factor markets, private accounts, external accounts, and government accounts, ensuring consistent modelling of economic behaviour. The model includes poverty analysis using the POVANA household model and evaluates land use changes and greenhouse gas emissions through agroecological zones and constant elasticity of transformation (CET) specifications.

Furthermore, the model incorporates farm policies through ad-valorem subsidies and detailed agricultural support data from the Ag-Incentives database, addressing nearly 90% of global agricultural production. This integration allows for a comprehensive analysis of food system policies and their impact on economic and environmental outcomes.

The analysis of agricultural subsidies in Latin America and the Caribbean (LAC) reveals significant disparities across subregions, which are likely to persist and even worsen by 2035 without targeted policy reforms. Under current projections, the level of subsidies in Mexico is expected to reach 12% of the value of agricultural production by 2035, while in Central America, it would represent less than 0.6%.

Harmonizing subsidies within national borders does little to create a level playing field between countries, as it maintains the existing disparities in subsidy levels within each region. In contrast, harmonizing subsidies across national borders would equalize subsidy levels across regions, although slight variations would remain due to differences in the value of agricultural production.

Under a scenario where subsidies are harmonized across national borders, financial transfers would primarily flow from high-subsidy regions such as the European Union and the United States to regions with strong domestic demand, like Sub-Saharan Africa, the Rest of Asia[3], and Rest of Southeast Asia[4]. While LAC would also receive net transfers, the extent would be more limited. It is important to note that in order to enhance the political viability of the policy scenario, countries that previously had a level of support lower than the global average are never contributing to the global financial transfers towards countries with a lower level of agricultural support, meaning only countries with historically higher levels of agricultural support compared to the global average are contributing to the global financial transfer.

Macro-Economic Outcomes

The findings indicate that global GDP would see a more substantial increase under a scenario of total harmonization of agricultural subsidies across national borders, driven by efficiency gains. Within LAC, GDP growth is particularly pronounced in subregions that receive financial transfers, specifically the Caribbean, Southern Cone, and Central America.

[3] ARE - BGD - BHR - IRN - IRQ - ISR - JOR - KWT - LBN - LKA - NPL - OMN - PAK - PSE - QAT - SAU - SYR - TUR - XSA - XWS

[4] IDN - KHM - LAO - MNG - MYS - PHL - THA - VNM - XEA - XSE

Moreover, the harmonization of subsidies within national borders would lead to a decrease in world prices, reflecting enhanced efficiency, especially for fruits and vegetables (-3.7%), grains (-1.5%), and coffee and tea (-1.5%). Conversely, when subsidies are harmonized across national borders, the impact on world prices becomes more varied, occasionally leading to slight increases for certain commodities, such as meat. These policy scenarios would also reorient subsidies and production towards regions with robust domestic demand, such as Africa, thereby reshaping the global agricultural landscape.

Social Outcomes

At the global level, the homogenization of subsidies across national borders yields significant social benefits - prevalence of extreme poverty, undernourishment, and unaffordability of healthy diets- all fall significantly (0.55, 0.47, 0.66 percentage point from the baseline respectively).

For the LAC region, there is a significant reduction in these social indicators in subregions receiving financial transfers. Under the initial baseline, the Caribbean, Southern Cone, and Central America experience marked improvements, in contrast, the Andean Region sees minimal changes in the prevalence of extreme poverty, undernourishment, and unaffordability of healthy diets. This limited impact is primarily due to the region receiving little financial transfer, with changes in social indicators driven mainly by shifts in agricultural production among sectors with varying labor intensities.

In Mexico, the harmonization of subsidies within national borders leads to a substantial decrease in both the prevalence of undernourishment and the unaffordability of healthy diets. This improvement is attributed to reduced import prices of agricultural commodities, resulting in a greater increase in import volumes relative to their value. Specifically, the value of imports for fruits, vegetables, and grains declines while their volumes rise. However, under the scenario of cross-border subsidy harmonization, agricultural production in Mexico experiences a significant decline due to a steep reduction in agricultural subsidies. Simultaneously, the world prices of agricultural commodities do not decrease proportionately, leading to an overall increase in the value of imports. The social impact in Mexico is somewhat mitigated by the country's exclusion from contributing to international financial transfers, with the reduction in subsidies compensated by non-targeted income transfers to consumers.

Environmental Outcomes

The policy scenarios under consideration reveal a global increase in agricultural emissions. However, this increase is relatively modest and varies across countries. Importantly, these scenarios do not account for technological advancements; the repurposing of agricultural support is neither conditional nor reallocated to extension services or research and development (R&D). The observed increase in agricultural emissions suggests a need for further exploration of conditional repurposing of agricultural support.

Sectoral Outcomes

Scenario 1: Harmonization of subsidies within national borders

The harmonization of agricultural subsidies within national borders presents significant impacts on the trade dynamics of Latin America and the Caribbean, particularly in the meat, fruits and vegetables, and coffee and tea sectors.

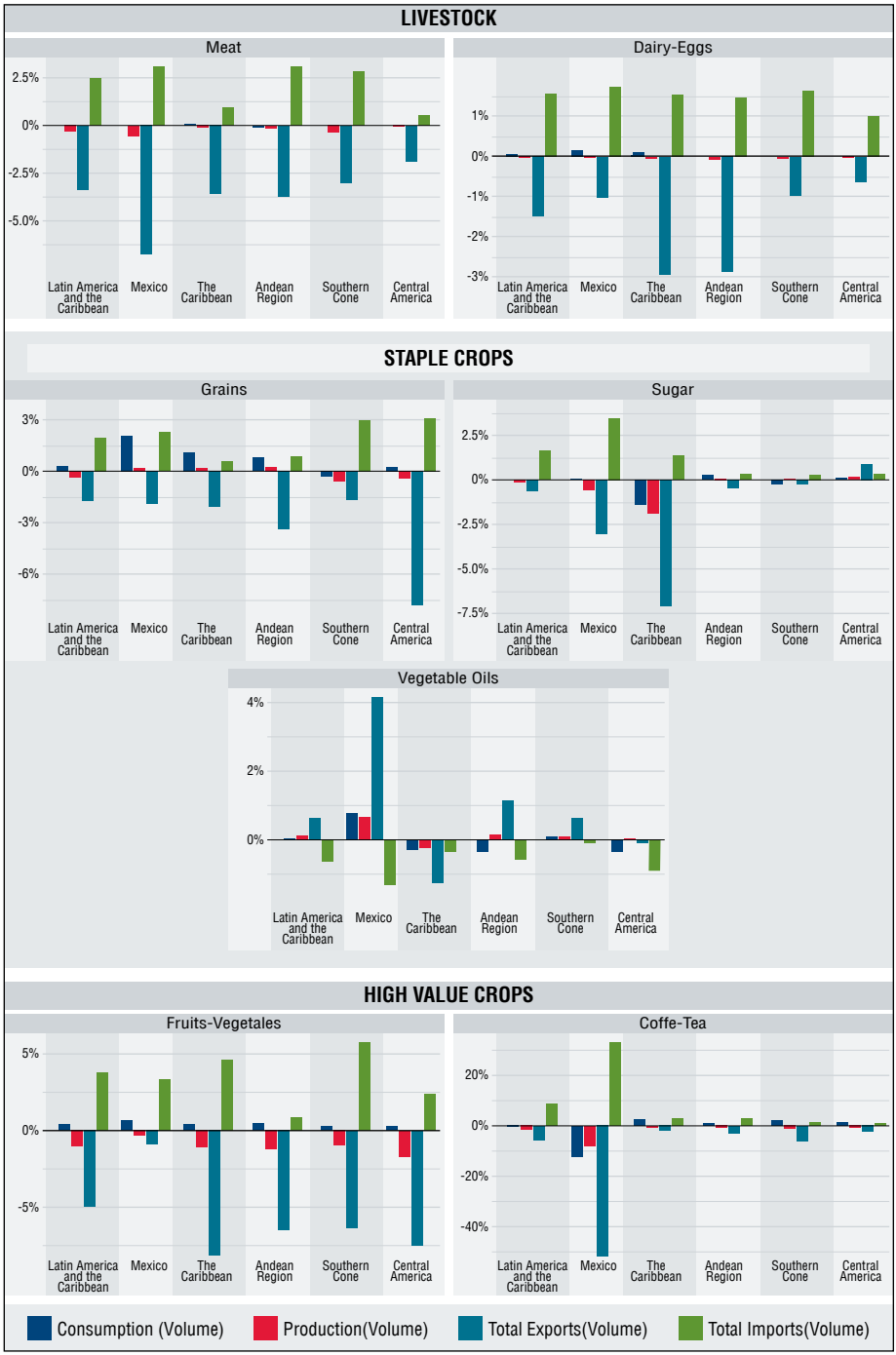
Under this policy scenario, meat exports from Latin America and the Caribbean are projected to decline significantly by 3.4% by 2035. This reduction is largely driven by a 3.0% decrease in exports from the Southern Cone, a region that faces a 0.4% decrease in production due to reduced subsidy levels. As a result, imports in the Southern Cone are expected to rise by 2.8%, and imports from Mexico are projected to increase by 3.1%, driven by a 0.6% decrease in domestic production. Collectively, these changes would lead to a 2.5% increase in meat imports at the regional level in Latin America and the Caribbean.

The exports of fruits and vegetables from Latin America and the Caribbean are also expected to decrease substantially, with a projected decline of 4.9%. This decrease can be attributed to a combination of increased domestic consumption (+0.4%) and decreased production (-1%). Notably, the Southern Cone and Andean Region would experience significant reductions in exports, by 6.3% and 6.5%, respectively. These declines result from the interplay between reduced production and increased consumption in these subregions. Although the harmonization of subsidies within national borders leads to an increase in subsidies for fruits and vegetables in these areas, the level of support remains lower than that of competing trade partners, leading to an uneven playing field.

Similarly, coffee and tea exports from Latin America and the Caribbean are expected to decline markedly by 5.7% under the harmonization scenario.

The Southern Cone and Andean Region are likely to see significant reductions in exports, with decreases of 5.9% and 3.0%, respectively, driven by a combination of increased consumption and decreased production. Concurrently, imports of coffee and tea in the region are projected to rise substantially by 8.9%, largely due to a more than 30% increase in imports from Mexico. In Mexico, the coffee and tea sector initially benefit from high levels of subsidies under the baseline scenario in 2035; however, these subsidies are significantly reduced under the harmonization scenario, leading to an 8% decline in coffee and tea production in the country.

FIGURE 6.1 Impact on production, consumption, exports and imports by sector by 2035. % change with respect to the baseline



Source: Authors' calculations based on Miragrodep model.

These findings underscore the critical trade-offs associated with the harmonization of agricultural subsidies within national borders, highlighting the potential for significant shifts in trade patterns, production, and consumption across key agricultural sectors in Latin America and the Caribbean.

Scenario 2: Harmonization of subsidies across national borders

Under a harmonization of subsidies across national borders, several key agricultural exports from Latin America and the Caribbean are projected to increase, driven by significant changes in subsidy levels, particularly in the Southern Cone.

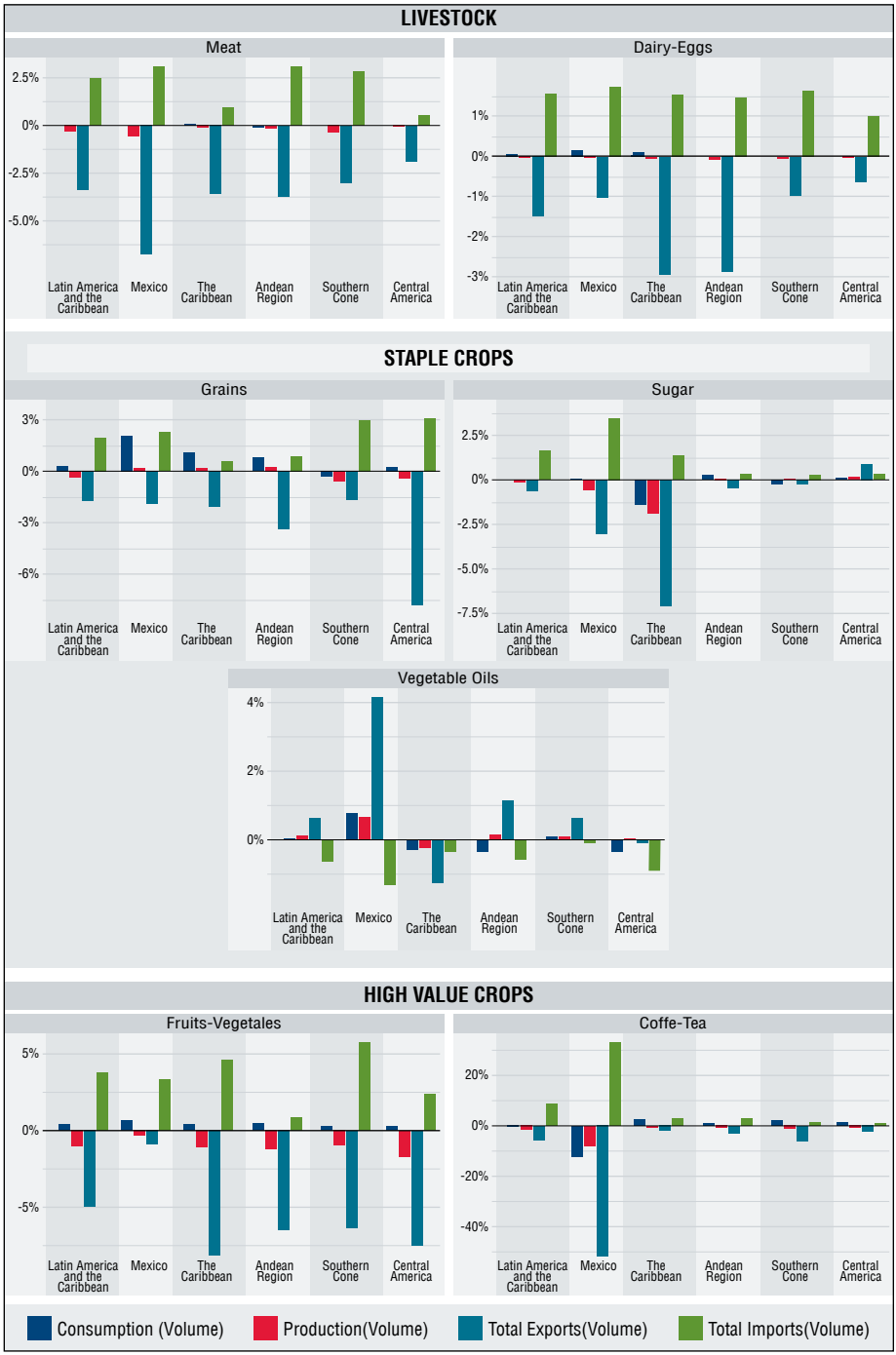
The harmonization of subsidies across national borders would lead to a 2.1% increase in meat exports from Latin America and the Caribbean by 2035. This growth is primarily driven by a 3.4% increase in exports from the Southern Cone, where production is expected to rise by 0.6% due to a substantial increase in subsidies, which would more than triple.

Grain exports from the region would see an even more pronounced increase of 4.1%, again largely attributed to the Southern Cone, where exports are projected to grow by 4.4%. The significant rise in subsidy levels in the Southern Cone, more than tripling, would boost production, leading to this increase in grain exports.

In contrast to the scenario of harmonizing subsidies within national borders, sugar exports from Latin America and the Caribbean would increase by 1.1% under the policy of harmonizing subsidies across national borders. This increase would be driven by higher exports from both the Southern Cone and Central America, with growth rates of 2.5% and 4.3%, respectively. These increases are due to a significant rise in sugar production in these subregions, following a more than quadruple increase in subsidies.

Under this policy scenario, coffee and tea consumption in the region would decrease significantly by 1.5%, primarily due to a sharp decline in consumption in Mexico (-16%). Despite this reduction in consumption, coffee and tea exports from Latin America and the Caribbean are projected to rise by 1.5%. This growth is driven by substantial increases in exports from the Southern Cone (+6.9%) and Central America (+5.3%), both of which would experience significant production increases due to higher subsidy levels.

FIGURE 6.2 Impact on production, consumption, exports and imports by sector by 2035. % change with respect to the baseline



Source: Authors' calculations based on Miragrodep model.

These results highlight the potential for increased agricultural exports in Latin America and the Caribbean under a scenario of subsidy harmonization across national borders, particularly for meat, grains, sugar, and coffee and tea.

The repurposing of domestic support has a clear impact on reducing the cost of current and healthier diets. Phasing out resources from staple foods may lead to modest reductions in undernourishment, underscoring the importance of carefully selecting the "right" products for support. Technology transfer, innovation, and financial resources are crucial for fostering adoption, particularly in the Global South. The elimination of existing policies presents a complex array of consequences, making the repurposing of policies essential, with a focus on sustainable intensification and prioritizing the production of healthy and environmentally friendly products. Governments face the challenge of balancing these opportunities to ensure a sustainable and equitable global agricultural landscape.

GLOBAL IMPLICATIONS AND LESSONS

The global implications of climate change necessitate new strategies, recognizing that policy reform is a country-level process with environmental impacts extending beyond national boundaries. Current support should be better targeted to reduce the cost of nutritious food, increase sustainability, and make trade freer while balancing farmers' incomes. Our modeling exercise reveals that removing existing distortions alone will not solve the problems, emphasizing the importance of investing in productivity gains and addressing productivity gaps.

Analyzing the impacts of scenarios on production, extreme poverty, undernourishment, and the affordability of healthy diets provides valuable insights. Scenarios with cross-border support redistribution show substantial improvements for low- and middle-income countries, indicating the potential benefits of a more equitable global distribution of agricultural support.

WHAT CAN BE DONE

Repurposing domestic support has a discernible impact on reducing the cost of current and healthier diets. Phasing out resources from staple foods may modestly impact undernourishment, highlighting the need for careful consideration in selecting the most appropriate products. Technology transfer, innovation, and financial resources will prove indispensable in facilitating adoption, particularly in the Global South. The removal of existing policies presents a complex landscape of consequences, making repurposing policies imperative, with a particular emphasis on sustainable intensification and prioritizing the production of healthy and environmentally friendly products. Governments must navigate the challenges and opportunities presented by repurposing policies, ensuring a balanced and sustainable global agricultural landscape.

CONCLUSION

Achieving a sustainable and equitable global food system requires a coordinated effort from the international community. Multilateralism, particularly through the World Trade Organization (WTO), plays a crucial role in guiding these efforts towards a sustainable future. Current debates and proposals within the WTO highlight the necessity for collaborative and innovative solutions to tackle the multifaceted challenges facing global agricultural and food systems.

A key step in this process is the reduction and removal of trade-distorting domestic support. Analyzing various scenarios, including support redistribution and environmental impacts, reveals significant potential for positive outcomes, especially for low- and middle-income countries. However, the complexity of global agriculture demands careful consideration of unintended consequences and a comprehensive approach that emphasizes sustainability, resilience, and inclusivity.

As nations navigate the landscape of policy reforms, it is vital to balance the interests of diverse economies, accounting for the unique needs of smallholder farmers and fostering international cooperation. Reallocating financial resources and making targeted investments in sustainable practices are essential strategies for achieving a fairer and more resilient global food system.

Multilateralism provides the framework for coordinating these efforts, ensuring that policy reforms transcend national boundaries and address global challenges collaboratively. The WTO serves as a central platform for international dialogue and negotiation, facilitating discussions and fostering consensus on critical issues such as the reduction of trade-distorting domestic support.

In summary, the path forward involves not only repurposing domestic support but also embracing a holistic and forward-looking approach that integrates environmental sustainability, technology transfer, and social inclusivity. By prioritizing these principles and leveraging the mechanisms of multilateralism, nations can collectively strive towards a sustainable and equitable global food system that meets current needs without compromising the ability of future generations to meet theirs.

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7

PRICE VOLATILITY, EXPORT RESTRICTIONS AND THE NEED FOR TRANSPARENCY

Nelson Illescas,
Jimena Vicentin Masaro

INTRODUCTION

Export barriers manifest in various forms, such as prohibitions, taxes, quotas, or licenses, among others. They have been imposed on both industrial and agricultural products by developed and developing countries, each pursuing distinct economic and non-economic objectives (Illescas & Jorge, 2021). Initially, with the negotiation of the General Agreement on Tariffs and Trade (GATT) in 1947, restrictions were taken into account in Art. XI, which in very vague terms prohibited the application of this kind of measure. Later, with the establishment of the World Trade Organization (WTO) in 1995, other equally ambiguous obligations were implemented[1].

In both cases, these measures were not considered a significant area of concern. Importantly, unlike their import counterparts, export restrictions and export duties received comparatively less detailed attention. While import tariffs were consolidated in schedules at the time of signing the Marrakesh Agreement, export duties have not undergone similarly comprehensive treatment by all WTO member countries. Notably, only certain nations, such as China, Ukraine, and the Russian Federation, among others, have consolidated their export duties[2].

Export restrictions are maintained to achieve diverse policy objectives, including environmental protection, conservation of natural resources, promotion of downstream processing industries, control of inflationary pressures, and generation of fiscal revenue. Additionally, they are often imposed by governments to promote domestic production to achieve "internal food security". While they may bring some short-term relief to domestic consumers, economic analysis clearly shows that their overall impact on the domestic economy, as well as on the rest of the world, is negative (Akter, 2022; Zhai, Yuan & Feng, 2022; Estada, Flores & Lezama, 2017, among others).

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1 The Agreement on Agriculture mandates that, when implementing a new export restriction, a WTO member is required to (1) assess the potential impact of the policy on food security in importing nations, (2) provide advance notice to the Committee on Agriculture, and (3) engage in consultations with WTO members having a vested interest in the exporting country's policies. It is noteworthy, however, that there are no sanctions or penalties prescribed for non-compliance with these provisions.

2 China, through its 2001 Protocol of Accession to the WTO, agreed to eliminate all export taxes and charges except for a group of 84 products, for which a maximum consolidated tariff was set. Ukraine, upon entering the WTO in 2008, agreed to the progressive reduction of export duties applied up to that time. When Russia joined in 2012, it consolidated export tariffs for around 700 products, establishing a schedule for the progressive reduction of rates. Except for 200 products, it agreed to completely eliminate export duties within a maximum period of 5 years as of its accession.

The rise in commodity prices observed in the last two decades has prompted a significant increase in export restrictions, notably for rice and wheat. This, in turn, has resulted in further substantial price hikes and impeded the adequate and timely procurement of essential food aid. When markets are turbulent, the implementation of trade restrictions by countries (especially if they are significant players in global trade) only serves to exacerbate the volatility, leading to even deeper crises (Vicentin Masaro *et al*, 2022; McMahon, 2022). Consequently, there arises an imperative – in the first place, the need to regulate and limit the use of such restrictive policy tools, and secondly, to establish an effective communication mechanism that fosters transparency. The aim is to uphold clear and enduring rules that incentivize trade as a mechanism for the efficient allocation of resources.

In this chapter, we explore how the WTO has struggled to fulfill its mission of advancing negotiations post the Uruguay Round. As export restrictions were not prioritized during the creation of GATT and the establishment of the WTO, this led to the utilization of export restrictions by countries, particularly in an unstable context, further exacerbating volatility in agricultural commodities. Moreover, as a result of an insufficient WTO notification system, countries have failed to promptly notify all measures. Furthermore, due to the paralysis of the Dispute Settlement Body, the WTO has lost its enforcement capacity, reducing the incentive for countries to engage in discussions within that forum, even when it is necessary to enhance transparency levels that provide greater certainty to dynamic and stressed markets, which is crucial for driving global food security and ensuring efficient allocation.

THE 'WEAK' REGULATORY FRAMEWORK GOVERNING THE USE OF EXPORTS BARRIERS

International regulations addressing export restrictions lag behind those governing import barriers (WTO, 2023). Governments and traders are currently contending with an escalating trend of increased utilization, particularly within the raw materials sector. In recent years, there has been a noticeable surge in the use of export restrictions in raw materials markets, contributing to increased uncertainty regarding the availability of supplies and generating

friction among trading partners. The lack of transparency in these measures has the potential to magnify and exacerbate the impact of restrictive trade policies (Evenett, 2020).

While some of these measures might be considered quantitative restrictions (QRs), which are generally prohibited within WTO rules, members are permitted to apply them in a limited number of situations. These can include exemptions from and exceptions to the rules pursuant to Articles XI:2 and XII (Balance of Payments) of the GATT 1994, respectively, as well as the general exceptions in Article XX and the national security exceptions in Article XXI of the GATT 1994. Additionally, QRs may be applied in accordance with certain specific exceptions provided under other WTO agreements, such as the Agreement on Agriculture (WTO, 2023).

The regulations outlined in the GATT facilitate the exemption of exported goods from all indirect taxes imposed by the exporting country. These provisions empower nations to impose export duties, should such measures be deemed necessary for regulatory control or the attainment of broader trade policy objectives. In parallel with import regulations, the GATT rules proscribe export restrictions, except within a limited set of circumstances.

However, the GATT framework recognizes that countries may be compelled to implement measures to regulate exports in specific situations, akin to scenarios involving imports. In such instances, countries are mandated to prioritize measures grounded in pricing mechanisms. Consequently, the rules permit countries to impose export taxes while explicitly prohibiting quantitative restrictions, unless justified by specified exceptions.

The GATT stipulations that forbid import restrictions are similarly applicable to export activities. Nevertheless, certain exceptions exist to this general rule. For example, a country possesses the authority to restrict or prohibit exports when deemed necessary to enforce standards or regulations governing the classification, quality control, or marketing of products intended for international trade, and to prevent or address acute shortages of essential products such as food.

Moreover, the regulations explicitly prohibit countries from imposing restrictions on raw materials with the intention of safeguarding or promoting a domestic manufacturing sector or to preclude competition among exporters. But the effect of implementing those measures in these scenarios can negatively impact food security and market stability. As an example, Espitia, Rocha and Ruta (2020) estimated that the escalating export restrictions during the outbreak of the pandemic COVID-19 multiplied the initial shock by a factor of 3, with world food prices rising by up to 18 percent on average.

In addition to the short-term effects, these export restriction measures generate long-term structural impacts not only on major importing partners but also on smaller importers, through modifications in international prices and, consequently, in domestic prices (Deuss, 2017). Mitra and Josling (2009, p. 12) demonstrated that "[…] all export restrictions-in the long as well as the short run-lead to a deterioration of welfare in both the country imposing such measures and the rest of the world".

CURRENT STATUS QUO OF THE NOTIFICATION AND TRANSPARENCY MECHANISM: IS IT ENOUGH TO IMPROVE MARKET PERFORMANCE?

Article XI:1 of the GATT 1994 calls for the general elimination of QRs; however, exceptions are permitted in specific circumstances, as outlined in various provisions. These include GATT Article XI:2, as well as the general exceptions of GATT Article XX, national security exceptions of GATT Article XXI, and other provisions within agreements such as the Agreement on Agriculture and the Agreement on Safeguards, along with other WTO Agreements. Each notified measure must be accompanied by a specific WTO justification.

There are two pertinent notification obligations concerning export prohibitions and restrictions. The first obligation arises from the 2012 "Decision on Notification Procedures for Quantitative Restrictions" (QRs) (hereinafter referred to as the QR Decision). According to this decision, members are required to notify all QRs in force on both imports and exports every two years, with provisions for notifying "temporary" measures as well (WTO, 2022). Newly introduced measures must be notified "as soon as possible, but not later than six months from their entry into force." QR notifications are automatically included in the agenda of the Committee on Market Access.

If a member introduces a new measure in the form of an export prohibition or restriction, other than a duty, tax, or charge, it must be notified to the

WTO through the QR Decision. Members are encouraged to provide comprehensive information, including details on the specific products affected and administrative aspects of the measure (such as duration, the national agency/ministry responsible, additional requirements, etc.). This facilitates an understanding of the scope of new measures by other members and economic operators.

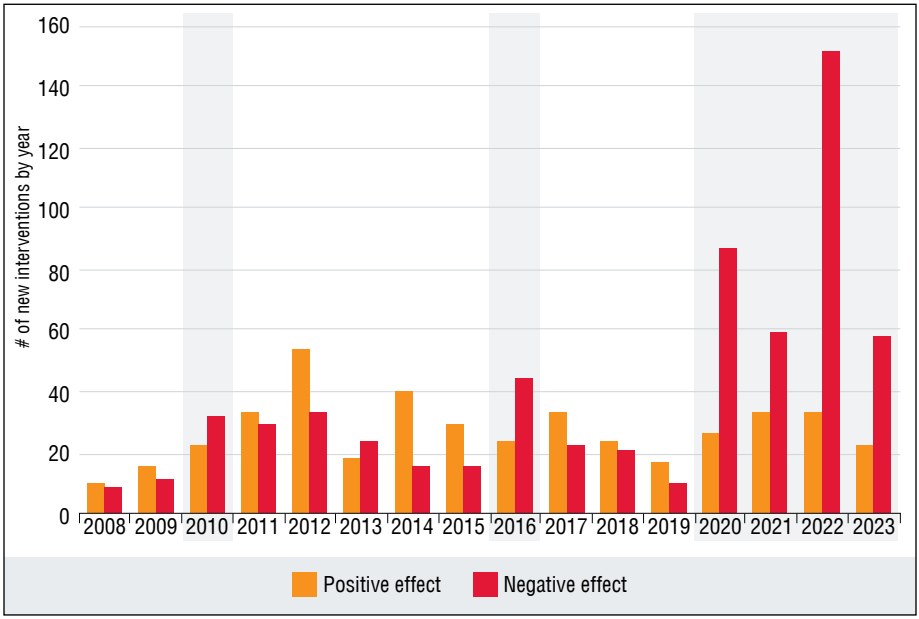
In addition to the QR Decision, Article 12 of the Agreement on Agriculture mandates members to notify the Committee on Agriculture of any prohibitions or restrictions on foodstuffs introduced pursuant to Article XI:2(a) of the GATT 1994. Article 12 also stipulates that a member instituting an export prohibition or restriction on foodstuffs must give "due consideration to the effects of such prohibition or restriction on importing Members' food security." Therefore, if a member applies such a measure to foodstuffs, it must follow the procedures outlined in Article 12 of the Agreement on Agriculture and notify the Committee on Agriculture accordingly.

In recent years, notifications to the WTO Committee on Agriculture have changed. Between 2008 and 2011, as commodity prices peaked, these measures were extensively used, without the corresponding increase in notifications to the WTO Committee on Agriculture. This scenario contrasts with the developments from 2020 onward, where the number of notifications has notably surged. Various countries have implemented export restrictions on specific products, along with the respective justifications for these measures. The primary reasons cited for these restrictions include preventing critical shortages in the domestic market, ensuring food security, addressing health concerns, and responding to specific challenges such as the global outbreak of Covid-19 or the influx of refugees.

The evolution in the number of new measures affecting the trade of agrifood and fertilizer products since 2008 can be seen in Figure 7.1, using data provided by the Global Trade Alert (GTA) Database[3]. It displays both measures that have had a positive impact on exports and those that have had a negative effect. Except in 2010, 2016, and from 2020 onwards, the number of measures facilitating exports has exceeded those that impede exports. This shows the growth of restrictive measures during market stress, when such measures do not help to mitigate the escalation of prices. As it was mentioned, export restrictions have become more prominent since 2020, with a series of measures introduced first in the context of COVID-19 and more recently of the war in Ukraine and the food security crisis, when commodity prices peaked (WTO, 2023).

[3] For more methodological details see Annex I.

FIGURE 7.1 Number of new trade policies that have affected agrifood and fertilizer exports since 2008, by year and expected effect on exports



Source: Prepared by the authors, based on GTA data.

Overall, the reasons behind these export restrictions range from responding to health crises and ensuring food security to preventing critical shortages and addressing specific challenges faced by each country. The justifications align with the countries' efforts to safeguard their domestic markets and populations in various contexts. Nonetheless, they trigger negative effects for other countries, and even more importantly, they introduce greater instability in international markets (Kerr, 2020).

Unfortunately, this occurs in a context where countries can only challenge restrictions within the scope of the WTO Committee on Agriculture. The next step available to affected partner countries would be to bring the case before the Dispute Settlement Body, but the lack of judges in the Appellate Body has rendered it practically pointless to initiate a dispute.

This shift in trend raises questions about the evolving dynamics of global trade and the challenges associated with addressing export restrictions within the current WTO framework. The significant increase in notifications after 2020 may reflect a growing recognition of the importance of transparency and

adherence to trade rules, even in the face of obstacles such as the paralysis of the Appellate Body.

The limitations imposed by the current situation underscore the need for reform within the WTO to ensure effective dispute resolution mechanisms. Without such reforms, the international trade community may continue to face difficulties in addressing trade disputes and promoting a fair and open global trading system.

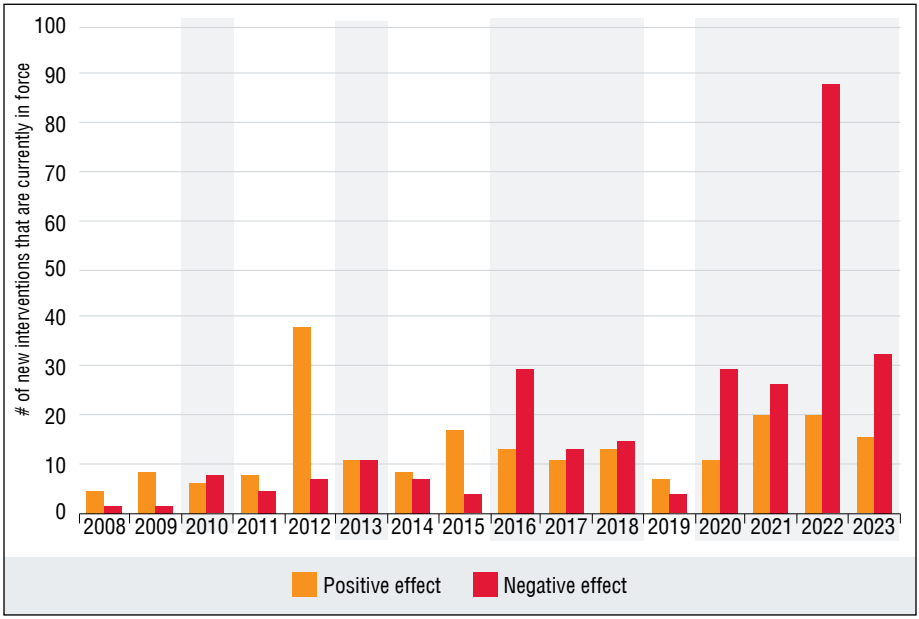
AN EXAMPLE OF EXPORT BARRIER RELEVANCE: THE DIRECT RELATIONSHIP BETWEEN STRESSED MARKETS AND THE EMERGENCE OF EXPORT RESTRICTIONS

The relevance of negative export barriers

Although some of the export restrictions that were introduced in 2022 have been rolled back, WTO confirmed that 75 export restrictions on food, feed and fertilizers are still in place globally (WTO, 2023). Figure 7.2 illustrates the evolution in the number of trade policies that are still in force, by year of inception. It shows that the measures that remain are predominantly those that restrict agrifood and fertilizer exports. The year 2022 saw the highest number of measures affecting exports from these sectors; and more than 80 measures with a negative effect on exports are still in place[4].

[4] Up to the beggining of 2024.

FIGURE 7.2 Number of trade policies as of 2008 that affect agrifood and fertilizer exports and that are currently in force, by inception year and expected effect

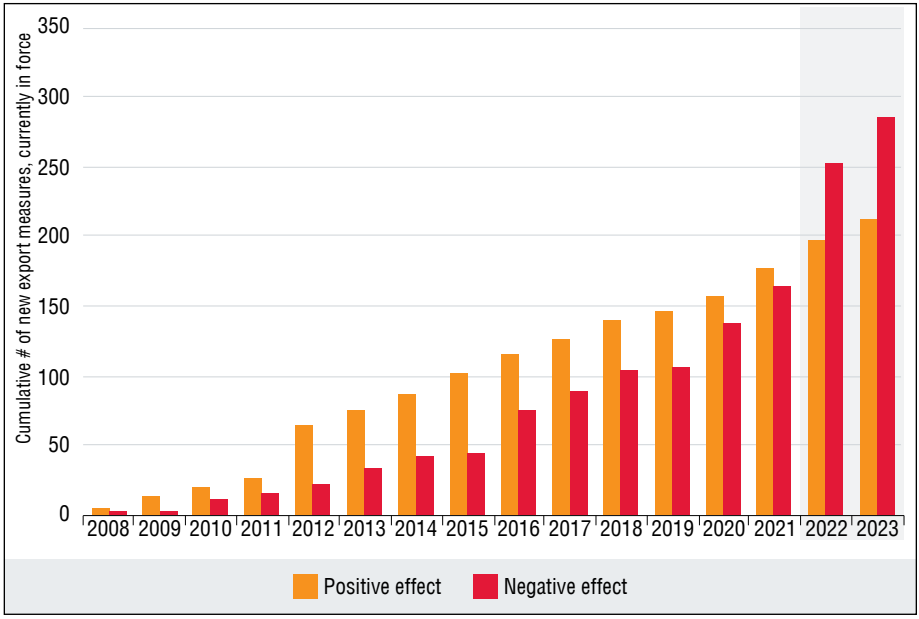


Source: Prepared by the authors, based on Global Trade Alert data.

Up to 2022, the cumulative number of measures that were still in force and that facilitated exports was greater than those that impeded exports (Figure 7.3). However, since 2022, this trend has changed, and there are a greater number of measures restricting the exports of agricultural products and fertilizers (Figure 7.3) that persist, even until this day. This has also coincided with the period of greatest instability in agricultural markets, where export restrictions by non-conflict countries add to disruptions in supply chains resulting from geopolitical conflict, leading to unstable and volatile markets.

A greater number of restrictions do not necessarily imply actual reductions in trade, as they might pertain to products that have very low volumes of operations in practice. Therefore, to approximate the real effects of restrictions on trade, the weight of the affected products in the global trade of these products is quantified, meaning only the global trade of the affected products is considered. This is referred to as the 'relevant market,' which is the total trade but only of the affected products. Figure 7.4 shows the importance of these measures (with positive and negative effects) in the total global trade of the affected products from 2017 onwards .

FIGURE 7.3 Cumulative number of new export policies since 2008 that affect agrifood exports and are still in force

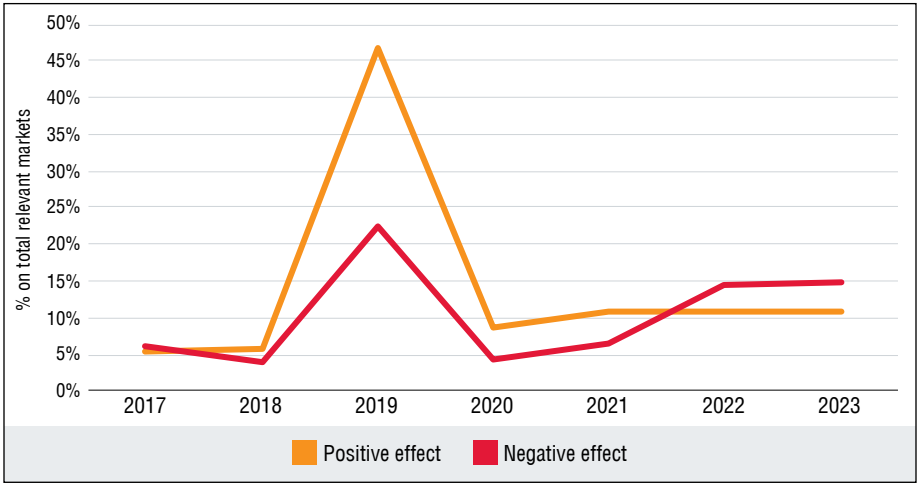


Source: Prepared by the authors, based on Global Trade Alert data.

Up to 2021, the measures applied with a positive effect on exports were greater than those with a negative effect and in 2019 the difference between them was more than double (Figure 7.4). Yet, this trend changed in 2022. After 2021, policies restricting exports had a greater reach than those that facilitated them. In 2022, almost 15% of agrifood and fertilizer exports were negatively affected by export barrier policies; meanwhile, less than 11% were positively affected by any of these measures. This gap persisted during 2023[5].

[5] Considering 2023 exports to be the same as 2022, because the annual statistics for 2023 are not yet available.

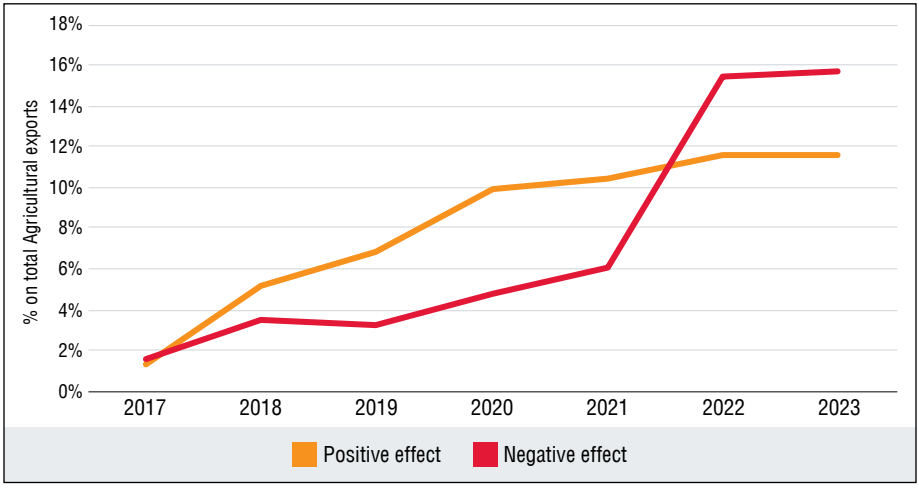
FIGURE 7.4 Affected exports as a share of total exports in relevant markets, considering only policies since 2017 that are currently in force



Source: Prepared by the authors, based on Global Trade Alert and Comtrade data.

As a share of worldwide agrifood and fertilizer exports, the upward trend of products negatively affected by policies is greater than the increase in those that are positively affected (Figure 7.5). Since 2022, more export barrier policies have been implemented than export facilitation measures, putting more pressure on highly volatile markets.

FIGURE 7.5 Exports affected by trade policies as a share of total world agrifood exports, considering currently in force policies



Source: Prepared by the authors, based on Global Trade Alert and Comtrade data.

Table 7.1 Exports as a share of affected markets, by red measure intervention type

Intervention Type	2017	2018	2019	2020	2021	2022	2023
Export ban	0.4%	0.0%	0.2%	3.4%	1.2%	11.1%	1.7%
Export licensing requirement	4.4%	2.1%	1.0%	2.2%	1.5%	8.6%	4.6%
Export quota	10.5%	1.2%	3.0%	9.0%	11.6%	6.0%	1.8%
Export tariff quota					0.0%		
Export tax	26.3%	2.3%	5.3%	4.3%	3.3%	2.0%	14.2%
Export-related non-tariff measure, n.e.s.	6.7%	35.2%		5.6%	11.7%	1.0%	9.8%
Local content requirement	3.9%	7.2%	0.0%		8.0%	0.0%	1.0%
Local supply requirement for exports				0.0%	0.6%	1.5%	5.1%

Note: considering solely the inception year and not necessarily policies currently in force.
Source: Prepared by the authors, based on Global Trade Alert and Comtrade data.

Table 7.2 lists the top ten countries that have implemented measures that have negatively impacted exports of products in which they have a significant market share. Of this group, India, Indonesia, China, and Argentina are the countries that consistently implement measures affecting exports negatively (applied for more than half of the period since 2017). Asian countries are the most significant, given that the implementation of restrictive measures is in markets where they are extremely important players, with an average market share above 20%.

Table 7.2 Top 10 countries' share of trade in affected product markets, by inception year

	Country	2017	2018	2019	2020	2021	2022	2023
1	The Netherlands						27%	26%
2	India	14%	1%	5%	1%	10%	26%	9%
3	Indonesia	0%	24%	1%	19%	2%	23%	39%
4	Malaysia	30%	1%				21%	0%
5	China	10%	5%	12%	16%	22%	21%	10%
6	Argentina		3%		3%	3%	10%	6%
7	United States	4%					9%	4%
8	New Zealand						7%	
9	Italy						6%	
10	France						6%	

Source: Prepared by the authors, using Global Trade Alert and Comtrade data.

FOOD EXPORT BANS: INCREASING THE RISK OF FOOD INSECURITY

Considering only the year 2022, and export bans, as the most restrictive export barrier, 61 countries implemented this measure on some product within the agrifood or fertilizer sector; and these measures remain in effect in 43 of the countries up to now.

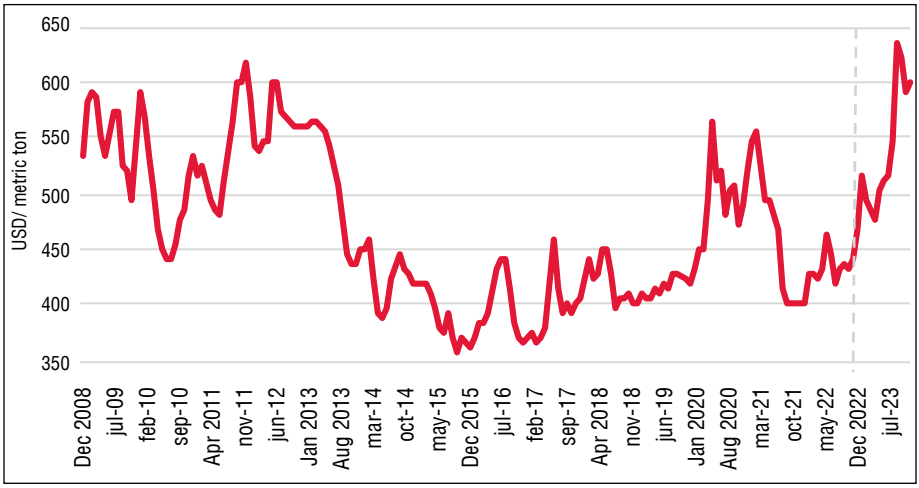
Table A shows the top 15 countries imposing export bans on food products in 2022, based on their impact on the exports of relevant markets. Among these countries, India and New Zealand are the most significant cases, as the bans affect strictly food products, and the countries are major players in maintaining food security.

Table 7.3 Top 15 export market share of countries with export bans in 2022+

	Country	Products	Country export relevance
1	India	Rice (1006)	36%
2	New Zealand	Milk and cream (0402) and butter (0405)	26%*
3	Canada	Crustaceans (0306)	11%
4	Myanmar	Dried leguminous vegetables (0713)	11%
5	New Zealand	Fresh strawberries, raspberries, etc. (0810)	8%
6	Italy	Sauce and preparations thereof (2103)	7%
7	Ukraine	Oilcake and other solid residues (excl. from soya-bean oil and groundnut oil) (2306)	7%
8	Canada	Meat of swine, fresh, chilled or frozen (0203)	7%
9	Argentina	Meat of bovine animals, frozen (0202)	7%
10	Netherlands	Sauce and preparations thereof (2103)	7%
11	New Zealand	Apples, pears and quinces, fresh (0808)	6%
12	Germany	Sauce and preparations thereof (2103)	5%
13	Germany	Soups and broths and preparations thereof (2104)	5%
14	Canada	Animal products not elsewhere specified (0511)	5%
15	Japan	Mollusks, fit for human consumption (0307)	5%

Notes: + Ranking those countries that implement export bans on food products. * on average.
Source: Prepared by the authors, based on Global Trade Alert and Comtrade data.

FIGURE 7.6 ▶ Internacional price of rice



Source: US Department of Agricuture; World Bank.

Also, due to its contribution to a healthy diet, India's export bans on rice are particularly significant. India holds a 36% market share in the global rice trade, so this ban would evidently result in relative scarcity in the international market, affecting key importers in Asia and Africa, such as Iran, Saudi Arabia, China, Benin and Senegal, among others. Figure A shows the evolution in rice production since 2008, and the imposition of the ban in August 2022, which overlaps with the beginning of the most recent price surges, reaching records levels for the last 15 years.

FINAL REMARKS

The World Trade Organization (WTO) was created to facilitate open and predictable trade, but its ability to fulfill this mission has been hindered by several factors. Export restrictions have not been adequately addressed since the Uruguay Round and this gap became even more evident during the Doha negotiations.

Recent global crises, like the COVID-19 pandemic and the conflict in Ukraine, have further complicated the international trade landscape. Countries have increasingly resorted to export restrictions, particularly for agricultural commodities, leading to significant market volatility. This highlights the need to reevaluate current trade policies to enhance stability and predictability.

One key challenge is the lack of transparency. Countries often fail to promptly notify the WTO of relevant measures, hindering the organization's ability to monitor and regulate trade effectively. Yet, nowadays 'transparency' not only involves making relevant information available to stakeholders but also doing so in a timely manner. Decision-making requires relevant and reliable information, and the opportunity to act on it. Thus, the paralysis of the Dispute Settlement Body weakens the WTO's enforcement capacity, reducing incentives for nations to engage in constructive dialogue.

Addressing these challenges requires a multilateral approach. Enhancing transparency through real-time notification of measures and providing capacity-building support to developing countries are crucial first steps.

While stricter disciplines on export restrictions could be considered in a future WTO agenda of negotiations, there are some other, less trade-distorting measures that might be more effective in achieving food security and fostering stable investment in agriculture. For example, countries could explore alternative policies to address domestic concerns about food price volatility. In the long term, shifting towards export duties instead of restrictions could improve predictability and stability in global trade. It is necessary to also analyze the effects of the measures to be implemented, whose scope extends beyond national boundaries, but also includes the indirect effect on other economies, given that countries are part of an integrated system.

Organizations addressing export measures should work together to unify databases and promote transparency[6]. Additionally, net food-exporting and importing countries could explore a plurilateral agreement to foster cooperation and create a more resilient and adaptable international trade framework.

[6] For instance, the Agricultural Market Information System (AMIS) initiative could be crucial. Launched in response to global food price escalations, AMIS currently focuses on wheat, maize, rice, and soybeans, but there is a need to broaden the scope of products under surveillance, including additional commodities and associated markets, inputs, and sea freight.

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ANNEX 7.I: METHODOLOGICAL CONSIDERATIONS

The analysis of export barriers is conducted using the GTA Database, which lists trade-impacting policy measures published by countries for each product, considering two types of agricultural products in the 4–digit Harmonized System (HS) 2017: 1-Agrifood products, encompassing all products with tariff positions in Chapters 01 to 24;and 2-Fertilizers (Chapter 31).

The GTA Database classifies each country policy as either Green, Red or Amber. When the intervention almost certainly discriminates against foreign commercial interests, the policy is classified as 'Red'; 'Green' is when the intervention liberalizes trade on a non-discriminatory (i.e., most favored nation) basis or improves the transparency of a relevant policy; and 'Amber' is when the intervention likely involves discrimination against foreign commercial interests. For purposes of this analysis, we considered only 'Red' and 'Green' policies as indices of export restriction and export facilitation policies, to compare their relevance.

As such, we have concluded that the following policies affect exports: a. export bans, b. export licensing requirements, c. export quotas, d. export tariff quotas, e. export taxes, f. export-related non-tariff measures, n.e.s., g. local content requirements and h. local supply requirements for exports. All of these measures could be considered 'Red' or 'Green', depending on the objective. The last two policies are generally not considered in export restriction or barrier analysis, but implementing them can still prove to be an impediment or a complication when exporting. Thus, they are included here.

Also, to assess the relevance of the measure for each policy, we also took into account export value, by product since 2017, using the Comtrade database for that purpose.

8 ENVIRONMENTAL CONCERNS AND AGRICULTURAL TRADE: BUILDING A RESPONSIBLE AND EFFECTIVE RELATIONSHIP

Sabine Papendieck and Brian McNamara

TRADE & SUSTAINABLE DEVELOPMENT: VOLUNTARY SUSTAINABILITY STANDARDS (VSS)

The rapid expansion of goods and services trade over the last several decades has created complex interdependencies between production, consumption, and job creation across economies. At the same time, a range of environmental issues-declining biodiversity, water scarcity, and water pollution, as well as climate change-are becoming more acute and call for strong, immediate, and coordinated international action. Countries and companies around the world are making ambitious climate change mitigation plans to address the climate crisis and to reach the net-zero emissions global target determined at the Paris Agreement. In this context, addressing the nexus between international trade and sustainable development is now more urgent than ever.

The link between trade and environmental challenges is particularly relevant for food systems, which have grown increasingly interconnected globally. The value of traded agricultural products has more than tripled since 2000 and over 40 percent of these imports and exports come from developing countries (Glauber 2022). As climate shocks continue to disrupt food production and distribution around the world, trade networks must improve systemic resilience by allowing suppliers and consumers to promptly change flows of inputs and food products in response to shocks.

In the 2030 Agenda, and especially in SDGs 12 (sustainable consumption and production) and 17 (partnerships for the goals), as well as the Addis Ababa Agenda, international trade and global supply chains are singled out as a key instrument to contribute to all other SDGs.

The 2030 Agenda for Sustainable Development defines international trade as "*an engine for inclusive economic growth and poverty reduction, [that] contributes to the promotion of sustainable development.*" In order for it to become a 'sustainable engine' that avoids negative environmental impacts (pollution and natural resource depletion), one approach that seems to be increasingly used is to "internalize" social, economic, and environmental concerns (mitigation and adaptation) in international trade. This can be done with many different policy instruments and tools. **In this chapter we focus**

on a common tool, namely Voluntary Sustainability Standards (VSS) targeting the environmental impact of agricultural trade.

The United Nations Forum on Sustainability Standards (UNFSS) defines VSS as "*standards specifying requirements that producers, traders, manufacturers, retailers or service providers may be asked to meet, relating to a wide range of sustainability metrics, including respect for basic human rights, worker health and safety, the environmental impacts of production, community relations, land use planning and others.*" VSS play an important role in guiding buyers and producers to better social and environmental outcomes in supply chains.

Any actor along a Global Value Chain (GVC) can adopt a VSS as a governance tool and commit to implementing its sustainability standards. Upon implementation, an initial conformity assessment is conducted based on a management plan submitted by the applicant, which outlines how conformity with the specific standards will be achieved. Monitoring or verification of the implementation of these plans are usually carried out by independent certifiers. If the applicant complies with the VSS, a certificate is granted. The validity period of VSS certificates varies, depending on the VSS. At the end of the validity period, the certificate can be renewed, conditional upon passing a re-certification conformity assessment. In addition, during the validity period of the certificate, complementary conformity assessments (i.e. annual "surveillance audits") are usually carried out to ensure continuous compliance with the standards. Recently, "risk-based due diligence", or "supply chain due diligence" approaches have been introduced for agricultural enterprises to "*...identify, assess, mitigate, prevent and account for how they address the actual and potential adverse impacts of their activities as an integral part of business decision-making and risk management systems*," according to the OECD-FAO Guidance for Responsible Agricultural Supply Chains.

VSS truly emerged in the 1990s, and their number grew consistently until the early 2010s. In July 2022, there were around 318 VSS in existence according to the ITC Standards Map, and around 456 ecolabels according to the Ecolabel Index, compared to around 50 VSS in 1990. The main challenges to 'mapping' these standards come from the fact that they are very different in terms of purpose, governance and scope, as well as implementation and expected impact.

FIGURE 8.1 Mapping of VSS - Differences

Purpose	Governance and scope	Implementation and expected impacts
• Product certification • Organization certification • Process certification • Topic certification • Standard benchmarking • Guidance and set of good practices • Performance assessment • Reporting framework • Policy framework • Due diligence	• Governmental public organization • Non-governmental private organization (for-profit or not-for-profit • Existence or not of multistakeholder decision-making processes • Product industry-specific scope versus no product industry scope • General or specific segment of value chain focus (production, processing and manufacturing, trading and retailing, consumption and end of life)	• Output activities and expected long-lasting outcomes and impacts • Time-bound versus no time-bound requirements for compliance • Existence of not of policies for public claims and labeling • Existence of an assurance model based on first-party, second-party or third-party verification.

Source: International Trade Center, Standards Map (2021).

There is no unique register for all VSS. Considering both the ITC Standards Map and the Ecolabel Index, the growth in the number of active VSS has been slowing down in recent years and has even stagnated since 2017[1,2]. Nonetheless the recent stagnant growth in the number of VSS schemes does not signify stagnation in their adoption by producers or firms along GVCs within different sectors, which can be measured by the share of certified commodities in their respective markets. While the proportion of land under certified production globally remains limited, it is nonetheless growing, and certified products are gaining market share as well. In summary, over the last three decades VSS have become an important transnational governance instrument and aim to make GVCs-from producer to consumer-more sustainable by taking into account social and environmental requirements within production processes.

Based on the ITC Standards Map database, the primary agricultural producer's sector represents the biggest share of the sustainability standards landscape. The most frequently certified products are agricultural products, followed by processed foods. In the agriculture sector, the number of VSS has risen markedly since the early 1990s. A new regulatory framework in agricultural trade has already taken hold and the time to adapt is now.

[1] https://standardsmap.org

[2] https://www.ecolabelindex.com/

HOW DO VSS WORK? HOW CAN TRADE BENEFIT FROM THEM AND WHAT ARE THE CHALLENGES?

To achieve sustainable and inclusive growth, it is vital that sustainable business practices be adopted throughout entire GVCs. In the agriculture sector, considering GVCs connected by international trade (a top to bottom requirement is that multi-national corporations and consumer markets spread stricter environmental standards across the globe), VSS usually require upstream farmers to adopt more sustainable and environmentally friendly practices that can support soil health; prevent soil erosion, surface water and groundwater pollution and biodiversity loss; and mitigate climate change. All these practices can ultimately result in improved productivity and profitability (bringing about higher and more stable crop incomes, lowering input costs by more productive efficiency and giving producers access to specific financial services). Depending on the context, these standards can also increase producers' knowledge and capacity to farm sustainably, while creating opportunities for stakeholder collaboration, including private and public sector engagement. This "diffusion effect" is seen as "environmental upgrading", a process of improving or minimizing the environmental impact of GVC operations.

FIGURE 8.2 ▶ Drivers of "environmental upgrading"

Source: International Trade Center, Standards Map (2021).

Environmental upgrading throughout value chains will occur depending on the governance arrangement and the position of the most powerful firms. In buyer-driven commodity value chains, which are dominated by developed market brands or large retailers, the likelihood of upgrading increases. Large retailers, strong brands or important consumer markets can often determine sustainability requirements downstream in the value chain.

In summary, VSS are instruments that can influence how GVCs operate at international, regional, and national levels. They have become a quasi-ubiquitous tool used not only by large firms and producers, but also by other stakeholders for different purposes. Financiers use standards to control the sustainability risks of their borrowers. Indeed, governments increasingly recognize VSS as tools to help them achieve their sustainable development objectives. For example, they are being integrated into or referenced in trade-related domestic regulations as well as bilateral and regional trade policy in several ways, such as in:

- **National and regional regulatory frameworks** that support or promote the development of certification schemes to advance sustainable production.
- **References in free trade agreements** (FTAs). VSS might feature more prominently in an FTA in the form of environment-related provisions (ERPs). For example, in the new FTA between the European Free Trade Area (EFTA) and Indonesia, VSS-certified palm oil products are assigned lower tariffs-or taxes-than non-certified palm oil products to promote sustainable palm oil production. Such provisions have become more common over time. The number of ERPs implemented between 1995 and 2022 increased from 30 to 5,807 across all regional trade agreements reported to the Food and Agriculture Organization (FAO), (Avesani *et al.* 2023). VSS can also be integrated into generalized systems of preferences (GSPs). For example, in the European Union's special incentive arrangement for sustainable development and good governance (GSP+), a country that commits to ratifying and implementing 27 international conventions concerning human and labor rights, environmental protection, and good governance can benefit from additional tariff preferences.
- **Market access regulations or export-promotion measures,** which allow certain products (timber, biofuel, meat, soy, palm oil, cocoa, rubber, coffee) to leave or enter the country only if they comply with specific sustainability criteria or with recognized/accepted certification systems.

Table 8.1 ▸ Examples of government-integrated VSS

Standard Name	Year	Purpose	Description
ARSO – Agriculture, Aquaculture, Fisheries Sustainable Cocoa – Sustainability and Eco-labelling	1977	Verification / Certification Best practices and guidelines	ARSO (Africa Organization for Standardization) is an intergovernmental organization established in 1977 by the former Organization of African Unity (OAU, currently the African Union (AU)) and the United Nations Economic Commission for Africa (UNECA). Its mandate is to promote standardization in Africa to boost intra-Africa and global trade. This includes to establish/harmonize African standards for all products of interest to intra-African trade and to operate a regional certification marking scheme, with a view to certifying the quality of and promoting African products. The mandate also includes the adoption of relevant international standards.
China Green Food	1992	Verification / Certification	Green Food standards on edible produce and processed products, stipulating that they be produced in a sustainable environment and according to technical standards requiring quality control, non-pollution, safety and quality, and awarding them the special Green Food logo. Green Food is a government food certification project initiated and coordinated by China's Ministry of Agriculture (MOA) and approved by the State Council in 1990, with the aim of enhancing food quality and safety, as well as protecting the agricultural bio-environment for sustainable development. The China Green Food Development Center (CGFDC) is a specialized department responsible for promoting Green Food standards under the supervision of the Ministry of Agriculture (MOA); conducting inspections, monitoring and auditing, as well as making decisions on authorizing the Green Food logo. CGFDC has 36 provincial Green Food offices nationwide, which are responsible for local Green Food management. By the end of December 2012, there were 72 designated Green Food production environmental monitoring stations and 56 product quality monitoring bodies. The monitored Green Food production environment (including farmland, orchards, tea plantations, grasslands, woodland, and water) has amounted to as much as 16 million hectares. The Ministry of Agriculture (MOA) has published 125 Green Food Technical Standards and developed over 400 local Green Food Production Technical Regulations.

Standard Name	Year	Purpose	Description
Chinese National Organic Products Certification Program	2001	Accreditation Benchmarking	The China National Organic Product Certification Program is a government project that aims to protect the ecological environment and enhance the quality of organic products. The Organic Products - Requirements for Production, Processing, Labeling and Management system (GB/T19630-2019) takes effect from 1 January 2020, replacing the standard GB/T19630.1- 19630.4 -2011. Organic product certification is governed and supervised by the national authority Certification and Accreditation Administration of the People's Republic of China (CNCA).
Esencial COSTA RICA (Essential COSTA RICA)	1996	Accreditation Verification / Certification Benchmarking	The development of a country brand is a strategy to position the image of a country on the international market. The aim is to boost the country's reputation through tourism, investment, and the export of goods and services. Costa Rica showcases itself to the world, promoting tourism, investment, and exports, along with Costa Rican culture and uniqueness. Costa Rica is a country that has a lot to say, and our way of speaking to the world is done through our country brand, "Essential COSTA RICA". To fulfill the promise we have made to the world, we guarantee that the companies that use the country brand represent our core values: • Excellence: businesses that showcase Costa Rican human talent through specialized goods and services. • Sustainability: companies that co-exist with the environment, using creative strategies. • Innovation: companies that make adjustments in the delivery of goods and services, aiming to increase their profitability. • Social Progress: companies that seek the well-being of their workers. • Costa Rican linkages: companies that demonstrate their connection to Costa Rica. The companies that represent these values undergo a thorough auditing process that grants them a license to use our country brand.
Green Mark Taiwan	1992	Verification / Certification	The Green Mark Program is the official voluntary eco-labeling program in Chinese Taipei founded in 1992 by the Environmental Protection Administration (EPA), aiming to encourage environmentally conscious production and consumption. The program is currently managed by a private institution, Environment and Development Foundation (EDF). As of 2012, the Program has issued Green Mark eco-label certificates to nearly 6,000 products under 117 product categories, including various cleaning products, office supplies and equipment, energy/water-saving products, home appliances, information technology products, construction materials, etc.

Standard Name	Year	Purpose	Description
EU Organic Farming	1991	Best practices and guidelines	Regulation (EU) 2018/848 establishes the principles of organic production and lays down the rules concerning organic production, related certification and the use of indications referring to organic production in labelling and advertising, as well as rules on controls additional to those laid down in Regulation (EU) 2017/625. It aims to revise and strengthen the European Union's (EU) rules on organic production and the labelling of organic products in relation to the control system, the trade regime and production rules.
ASEAN Guidelines on Promoting Responsible Investment in Food, Agriculture and Forestry	2018	Best practices and guidelines	The ASEAN Guidelines for Responsible Investment in Food, Agriculture and Forestry are inspired by and grounded in the Committee on World Food Security's Principles for Responsible Investment in Agriculture and Food Systems (CFS-RAI). They are addressed to the governments of ASEAN Member States (AMS) and adapted to the group's specific challenges, while also foreseeing key roles and responsibilities for stakeholders outside of government, including large-scale private actors. These Guidelines are also inspired by the United Nations' Sustainable Development Goals (SDGs) and refer to them where appropriate. The Guidelines are voluntary in nature.

Source: ITC Standards Map. Retrieved January 12, 2024.

Note: This is a sample of VSS taken, prepared and edited using information from StandardsMap.org. Search criteria included all subcategories under the Environment and Climate Change theme; the Agriculture, Livestock, and Processed Foods sectors; and the Public Entity and International typologies.

Consequently, VSS can be catalysts to different aspects of trade (see Figure 8.3).

FIGURE 8.3 ▸ VSS as Catalysts to Trade

- **Increase environmental performance** and information on products, improving operational efficiency and risk management.
- **Encourage R&D** to have better and more "own" data.
- **Prevent environmental leakages** to origins with less stringent environmental commitments (pollution havens) and encourage relocation of production to most environmentally efficient countries/regions.
- **Moderniza value chains** through capacity building, technology, and innovation transfers.
- **Enhance integration of value chains,** strengthen transparency and traceability, improve relationships with reliable suppliers.
- Build credibility with communities, NGOs, governments, and financial partners. Stronger reputation.
- **Lead to increased exports,** as VSS provides a competitive advantage to complying producers; and signal sustainable production practices that facilitate their market access to foreign markets.

Greater value, volume and efficiency of trade

Source: International Trade Center, Standards Map (2021).

On the other hand, the expansion and increased influence of VSS and their lack of harmonization have become a growing concern and challenge for suppliers, particularly in low-income countries. If VSS are de facto mandatory (because of private contractual clauses or public requirements) for specific markets, small-scale producers, in particular, risk being excluded from export value chains due to **high compliance costs (adaptation costs) and increasing costs for audits and certification, as well as certification maintenance.** This might result in certification costs outweighing the benefits. Besides, in many cases the **impact calculation methodologies and protocols are based on life cycle assessments not adjusted to local productive practices and conditions and default emission factors** (developing countries are almost excluded from VSS dynamics). The implementation then generates a bad rating. So, if producers in developing countries are competing directly with producers in developed countries but are in general less able to implement the requirements of VSS at a given level of cost and lack technical local support and capacity building, they could lose out. Indeed, one of the essential requirements for VSS adoption is an ecosystem of supporting actors working closely with smallholder farmers. This calls for a more targeted approach to certification.

A second barrier relates to a **lack of monetary incentives for producers.** In some cases, certified producers are paid higher wages than conventional producers for their certified soy, cotton, palm, coffee, cacao, fish, timber, etc. or uncertified producers received a discounted payment for failing to meet established standards, unlike certified producers who are paid full price. Based on these findings, it may be concluded that VSS are indeed successful in improving the economic conditions of certified producers. However, other studies found that these price premiums (intermediate outcome) failed to translate into economic endpoint outcomes. The additional revenues that producers generate through price premiums can ultimately be too modest to cover the costs of certification and associated on-site investments to meet VSS requirements. In other cases, the bonus (environmental quality-based price differentiation) does not exist, there is a lack of consistent contracts or no financial support is provided to accompany the implementation. Producers might expect that consumers will be willing to pay more for certified products, but this is not always the case. All play a critical role as a limiting factor in their uptake. There is also a need for effective linkage of incentives to performance, in the absence of which there is unlikely to be noticeable behavioral change. In sum, the greatest challenge VSS currently face in developing countries to catalyze the implementation of more sustainable practices is to generate more financial resources per certified unit.

In the absence of such positive economic incentives, producers are likely to drop out. Moreover, if there is no governance regime that imposes **credible sanctions** (commercial exclusion and tax burdens, among others) on those who do not adopt VSS, there will be no compliance. This is a governance gap given the fact that producers in many countries operate in a regulatory context that is not aligned with the regulatory approach of VSS.

In addition, VSS can be **considered non-tariff barriers to trade** and can be perceived as being more trade restrictive than necessary under a precautionary environmental principle, thus limiting the potential of their use by developing countries (sociopolitical resistance).

The aforementioned barriers result in non-adoption of VSS. So, the potential of VSS to make trade more sustainable relies on two crucial components. First, they must create a substantial impact on the ground with respect to key sustainability parameters (**impact-dimension**). Second, to enhance their impact, they need to be widely adopted (**adoption-dimension**). Adoption is a relevant dimension of effectiveness because the more widely VSS are adopted, the more likely they will be to improve sustainability. If they are only marginally adopted, their potential to transform production processes in GVCs for greater sustainability is limited.

Thus, VSS can be viewed as powerful market-based tools to scale up sustainable development only if the challenges facing developing countries and producers as well as their concerns relating to these standards are adequately addressed.

THE COMPLEX LANDSCAPE OF VSS: PROLIFERATION AND LACK OF HARMONIZATION

The diversity of standards created by different actors for different purposes can be a good thing. However, on the global scale it can be challenging to understand the differences, similarities, and opportunities for interoperability between standards.

Several drivers will be critical in reshaping, rethinking, and reinventing sustainability standards, including:

- **Technology** (It could even replace standards, as it offers more and more credible ways to assess, verify and make sustainability performance along the value chain transparent, for example blockchain).
- **Traceability and transparency** (Compliance will largely have to be addressed through more transparency at all levels of international value chains and better traceability/chain of custody of products – supply chain tracking).
- **Finance** (Financial institutions have already started to transform their portfolio of services, focusing more and more on sustainability and using environmental, social, and governance indicators in their financing operations).
- **Harmonization** (to help harmonize the complex landscape of VSS).

Regarding this last driver, the rapid proliferation and multiplicity of VSS globally is a growing concern, particularly to smallholders and farmers in developing countries who are increasingly required to comply with several standards to access markets at local and international levels, including mandatory quality and safety standards. The first measure to be taken to enhance harmonization is **benchmarking**, which is the assessment of multiple sustainability standards, policies, tools, or company performances against fixed common criteria. This makes it possible to better compare the scope, coverage, and outcomes of standards. Also, the **absence of a common regulatory or guiding framework** and defined transparency rules that apply to all schemes makes it difficult for producers and consumers to distinguish

reliable, credible, or effective VSS from ineffective ones, as well as understand how they define sustainable production and measure the environmental and social performance of their compliant practices. This situation highlights the need **to set up common mutual recognition systems that result in a harmonization of the multiple schemes.**

Further complicating the matter is the fact that, given that standards are not governed by trade law in the same way as legally binding laws and multilateral regulations, there is **a lack of a connective structure to ensure interoperability or compatibility** between national, multilateral, regional, and private industry perspectives on sustainability. Nor is there one internationally recognized body to create a level playing field for all initiatives. The truth is that the content of standards is also changing.

WTO'S CURRENT WORK ON THE ENVIRONMENT AND AGRO-INDUSTRIAL TRADE

The World Trade Organization (WTO) has taken steps to build an environmentally sustainable trade system, by incorporating environmental concerns into trade agreements and discourse.

The WTO formally adopted sustainable development as an explicit guiding principle in the 1995 **Marrakesh Agreement**. Since then, members formally acknowledged the right to enact environmental standards under trade-friendly conditions during the **Doha Ministerial Conference** in 2001, and outlined plans to analyze links between trade, climate change, and sustainable value chains in the 2021 Ministerial Statement. All of them support the principle that the ultimate goal is the promotion of sustainable development.

The organization established the **Committee on Trade and Environment** in 1994 to address environmental issues between members and ensure that trade policy and the environment are mutually supportive. In 2023, some major areas of work included market access issues such as the Carbon Border Adjustment Mechanism under the European Green Deal, sustainable development discussions on environmental subsidies, multilateral agreements under COP28, and strategies to mitigate carbon leakages, including the implementation of voluntary standards and labeling, among many others.

The **Agreement on Technical Barriers to Trade (TBT)** is another major WTO action on sustainability, which allows members to implement environmental and other standards if they are minimally trade distorting. The agreement also encourages members to follow international standards, when possible, to improve coherence among countries. Besides, at the Second Triennial Review of the Agreement in 2001, the TBT Committee developed guidance on how best to develop such standards in **"Six Principles for the Development of International Standards, Guides and Recommendations"**[1]:

a. **Transparency:** All essential information regarding work programs, as well as on proposals for standards, guides, and recommendations under consideration and on the results should be made easily accessible to at least all interested parties in the territories of at least all WTO members. Procedures should be established so that adequate time and opportunities are provided for written comments.

b. **Openness:** Membership of an international standardizing body should be open on a non-discriminatory basis to relevant bodies of at least all WTO members.

c. **Impartiality and consensus:** All relevant bodies of WTO members should be provided with meaningful opportunities to contribute to the elaboration of an international standard so that the standard development process will not give privilege to, or favor the interests of, a particular supplier/s, country/ies or region/s. Consensus procedures should be established to consider views of all parties concerned and to reconcile any conflicting arguments.

d. **Effectiveness and relevance:** International standards need to be relevant and to effectively respond to regulatory and market needs, as well as scientific and technological developments in various countries. They should not distort the global market, have adverse effects on fair competition, or stifle innovation and technological development. Whenever possible, international standards should be performance based rather than based on design or descriptive characteristics.

e. **Coherence:** The principle of coherence encourages international standardizing bodies to avoid duplication of, or overlap with, the work of other international standardizing bodies. In this respect, cooperation and coordination with other relevant international bodies is essential.

[1] Source: https://www.wto.org/english/tratop_e/tbt_e/principles_standards_tbt_e.htm

f. **Development dimension:** This requires taking into consideration the constraints on developing countries to effectively participate in standards development. Tangible ways of facilitating developing countries' participation in international standards development should be sought. Provisions for capacity building and technical assistance within international standardizing bodies are important in this context.

The TBT Committee has also provided guidance that WTO members can rely on when seeking to accept conformity assessment results of other members. It has developed an **Indicative List of Approaches to Facilitate the Acceptance of the Results of Conformity Assessment**[2] covering a range of approaches that governments might choose to facilitate recognition:

a. Mutual recognition agreements for conformity assessment to specific regulations.

b. Cooperative (voluntary) arrangements between domestic and foreign conformity assessment bodies.

c. The use of accreditation to qualify (or recognize) conformity assessment bodies.

d. The designation by governments of specific conformity assessment bodies, including bodies located outside their territories, to undertake conformity assessment.

e. A government's unilateral recognition of results of foreign conformity assessment.

f. The possibility of relying on the manufacturers or supplier's declaration of conformity (SDoC) to the specified requirements.

The WTO also established the **Standards and Trade Development Facility (STDF)** along with FAO, the World Health Organization (WHO), the World Organization for Animal Health (WOAH, formerly the OIE), and the Word Bank, to build exporter capacity in developing countries to meet Sanitary and Phytosanitary (SPS) standards contributing to sustainable economic growth. The Facility does this through national, regional, and global capacity strengthening projects, along with promoting good practices in SPS. In addition, WTO launched the **Healthier Environments through Trade Initiative** with the UN in 2018. The initiative provides a space for stakeholders

[2] Source: https://worldtradescanner.com/TBT-54.pdf

across sectors to share experiences and identify trade strategies and investment opportunities to support the Sustainable Development Goals.

In 2020, fifty WTO members launched the **Trade and Environmental Sustainability Structured Discussion (TESSD)** to support the work of the Committee on Trade and Environment and promote the protection and preservation of the environment within the global trade system. Currently, 76 countries participate in the discussions, which are organized into several working groups related to Environmental Goods and Services, Subsidies, Trade-related Climate Measures, and Circular Economy. As a forum for actors from private, public, academic, and civil society institutions to come together and discuss trade-related environmental issues, the TESSD is an important entry point for cross-sectoral collaboration and the development of strategies to promote sustainable value chains. In 2023, major topics discussed in the working groups included the development of sustainable supply chains, technology, services, and the implementation of regulations, as well as challenges to participating in the trade of environmental goods and services faced by least developed countries. As part of COP28, TESSD and WTO also provided a list of trade-related tools that can be used to address climate change, which included using international standards to avoid fragmentation when upgrading energy efficiency regulations and rebalancing import tariffs to increase the uptake of low-carbon technologies (WTO, 2023). This last action could be implemented through **tariff preferences for environmental goods and services,** which essentially provide lower tariff rates for traded products that meet certain sustainability criteria. In preparation for the 13th Ministerial Conference in February 2024, the group also proposed creating an outline of member practices in the development of trade-related climate measures, including transparency mechanisms, impact assessments and guiding principles, along with mapping the trade aspects of the circular economy along the lifecycle of products.

WTO negotiations and agreements related specifically to agrifood trade have recently been oriented around questions of market access, domestic support, and food security, with less attention paid to environmental concerns in the sector. The first multilateral agreement focused explicitly on this sector emerged from the Uruguay Round in (1995) and established reductions in subsidies and trade barriers to improve competition in global markets, while also acknowledging the need for trade policies to ensure food security. The last two ministerial conferences have focused primarily on responding to recent market shocks that have threatened food security in many regions. WTO members adopted a Ministerial Declaration on the Emergency Response to Food Insecurity and a Ministerial Decision on World Food Programme Food Purchases Exemptions from Export Prohibitions or Restrictions during the 12th Ministerial Conference (WTO, 2022a) (WTO, 2022b). These were accompanied by agreements on fishery subsidies and phytosanitary standards, but no agreements related directly to environmental policy. Looking ahead to 2024, the seven areas of negotiation related to the agrifood sector for the 13th Ministerial Conference include: domestic support, market access, export restrictions, cotton, special safeguard mechanisms, and public stockholding for food security purposes. Unlike these topics, environmental concerns have not been prioritized.

Most WTO actions addressing the link between environmental concerns and food systems have been focused on domestic support for the agri-food sector, such as subsidies for producers. Ongoing efforts within the WTO system to limit subsidies and their market distorting effects can promote environmental sustainability and reduce greenhouse gas emissions in food systems (Glauber *et al*. 2021) (Gautam *et al*. 2022). The organization has also encouraged members to allocate support for "green box" measures, which can be used as important tools to promote environmentally sustainable food production and trade. These include expenditures that have a minimal impact on trade, such as investments in infrastructure, research, and direct payments to local producers under environmental programs, along with other forms of spending that are decoupled from production.

While the WTO has taken some meaningful steps to reduce market distortion and promote environmental sustainability in agricultural public support, the organization has taken little action related to agri-food trade and environmental standards and to establish some concrete trade-related incentive for agri-food production. **As highlighted in the following sections, this represents a major policy gap that the WTO should fill. The agri-food sector has more VSS than any other area of the economy and nowadays sustainability is a market access condition. However, action must be taken to improve coherence, transparency, and accountability across this web of policies.**

THE LACK OF A GLOBAL GOVERNANCE FRAMEWORK – POINTS THAT THE WTO SHOULD ADDRESS

The nature of the WTO as an intergovernmental organization that regulates and facilitates international trade makes it challenging to include VSS in WTO discussions and effective trade related measures. This is not only due to the voluntary nature of the standards, but also due to the ownership, governance, and authority of them. Some vital questions for the WTO include who makes and owns these standards, and how they are governed. Also, what are the levels of these standards (for example, national, regional, or international) and what is their degree of obligation. However, **the increase in the degree of adoption of VSS by governments, the legal subjects of the WTO, and the shift towards mandatory regulatory approaches (hard law), make the greater involvement of the WTO necessary.** This is the case with regulations such as the EU Regulation on Deforestation-free Products or the Directive of Sustainability Reporting.

If government authorities use different yardsticks to make these measurements, producer/exporter and importer implementation, global tracking and comparisons may be very difficult. Ideally, VSS should be based on international standards agreed by consensus; and these would provide a framework for all entities (public and private) to calculate, monitor, trace, and certify. This is what the TBT Agreement strongly encourages. Technical regulations in accordance with relevant international standards are a priori considered as not creating unnecessary obstacles to international trade (Article 2.5 TBT). The difficulty is that in VSS there is not a unique standard or protocol. So, the governments must follow the established guidance on how best to develop such standards in the “Six Principles for the Development of International Standards, Guides and Recommendations”. **Regulatory cooperation, mutual recognition, and equivalence** between WTO members on a sector-by-sector basis may be an effective means of building trust between regulators and may serve as an incubator for discussions at the multilateral level on emerging regulations (public and private). Aligning standards will help members’ climate change mitigation efforts. It is imperative that an attempt be made to emulate the consensus reached on sanitary and phytosanitary matters within the framework of the WTO.

All VSS also have a verification and communication chapter. In TBT terms, when a member implements a verification procedure, it is referred to as **conformity assessment**. These procedures give the counterparty or the next link along the value chain the confidence that a product meets the necessary technical requirements set out in regulations or standards. WTO disciplines encourage members to accept, whenever possible, the results of conformity assessment procedures performed by other members, even when those procedures differ from their own. At the same time, it is also important to ensure that these procedures are not discriminatory and do not create unnecessary obstacles to trade. Moreover, harmonized procedures reduce differences in terms of the verifiers' competences and the verification approaches, which increases the overall quality of verification; thus, verification should also be harmonized.

Once the verification has been completed, the communication of this information along the value chain is essential. One way to do this that is closely related to verification is through **labelling.** It is a very common measure covered by the definitions of both "standards" and "technical regulations" in the TBT Agreement (Annex 1, paragraphs 1 and 2). The TBT Committee has specifically recommended that if a verification procedure results in a mandatory labelling requirement, it is subject to the notification provisions of the agreement, regardless of the kind of information that is to be provided on the label. At the WTO, there have been discussions about the effectiveness of environmental labelling measures and how best to inform consumers through labels, about the carbon footprint and environmental life cycle of products, for example. Some of these discussions have taken place in the form of specific trade concerns (STCs) raised within the TBT Committee. For example, a leading case saw Mexico raise a dispute against the US over its dolphin-safe standard for some tuna product imports, which was resolved in 2018. One key challenge is ensuring that labelling requirements are clear and credible and achieve the desired policy objectives without creating unnecessary obstacles to international trade. To address such issues, the TBT Agreement has also provided a Code of Good Practice for the Preparation, Adoption and Application of Standards.

In summary, **VSS must be closely aligned in order to enhance sustainable trade.** To date, there are no positive considerations in harmonization, mutual recognition, or equivalence regarding required VSS adopted by governments as technical regulations (legally bindings laws).

Besides, it is important to ensure the participation of all countries (developed and developing) in the development of international standards (**inclusiveness**) as mentioned in Annex 3 of the TBT Agreement – Code of Good Practice. Otherwise, the risk is that standards may not adequately reflect national (or

regional) contexts or challenges. Discussions in the WTO Committee on Trade and Environment have highlighted a variety of concerns with respect to the "non-neutrality" of standards. It will be paramount to provide support to developing countries and LDCs, and their companies (particularly small or medium- sized enterprises), so that they can effectively participate in the setting of relevant international standards.

Finally, there is a need to include **trade-related incentives that can lead to the adoption of VSS** among the urgent points that the WTO must address. In the same way that progress has been made in establishing a tariff preference scheme for environmental products and services (mainly green technology) and some governments have included preferences for sustainable products in GSPs and FTAs, a tariff preference scheme for environmentally efficient agricultural products must be enhanced, at least in the initial stages, covering the costs of implementation in the primary production links. Without incentives there will be no mass implementation. Incentives are the key to ensuring that trade becomes an engine for sustainable development.

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9

GLOBAL FOOD SECURITY CONCERNS AND AGRICULTURAL TRADE: BUILDING A RESPONSIBLE AND EFFECTIVE RELATIONSHIP

Adriana Campos and Pablo Elverdin

INTRODUCTION

Since the Agreement on Agriculture came into effect trade in food has quintupled. The rules agreed under the framework of the World Trade Organization (WTO) allowed developing countries to join external markets and increase their participation to the point that they now account for two thirds of the overall flow of agricultural trade.

There is no doubt that this improved access to food, both in terms of quality and variety, has led to improved figures for food security and global nutrition, especially in developing countries. However, the importance of trade to food security has always been severely questioned.

Recently, a range of shocks to the system that affected the supply and availability of foodstuffs and energy have restored the food trade to the prominence it deserves, emphasizing its importance to global food security, especially in the least developed countries (LDCs). One example of this is the issue's explicit inclusion for the first time in the Ministerial Declaration at the Twelfth Ministerial Conference (MC12).

Of course, after over two decades of slow progress, a simple mention does not resolve the pending issues, but it does make clear the need to make more rapid progress as part of a multilateral framework to meet the challenges presented by the current food supply situation. It is important to bear in mind that in addition to the issues presented on the Agriculture Agenda, rapid

transformations in agricultural systems demand the incorporation of new fields, the beginning of discussions with other working groups at the WTO and the forming of links with other multilateral bodies that can contribute to a complete and permanent resolution to the food crisis.

Given the continuing increase of the global population, the first challenge in bringing an end to global hunger is to increase the production and overall availability of food across the world. The divergence in productivity rates and the high level of food loss and waste show that there is plenty of progress to be made in this regard. However, any increase in production must also be environmentally and socially sustainable.

Given the inequity in the distribution of natural resources for the sustainable production of food and the divergences in population distribution across the planet, trade will continue to be the means through which to reconcile surpluses in the supply and demand of food. Even countries that can supply their own needs must trade to achieve more diverse diets.

Thus, given the urgency of contemporary food and environmental crises, all members of the WTO have an obligation to achieve consensuses that will reduce the uncertainty and volatility of the markets, provide greater transparency and facilitate the trade in food.

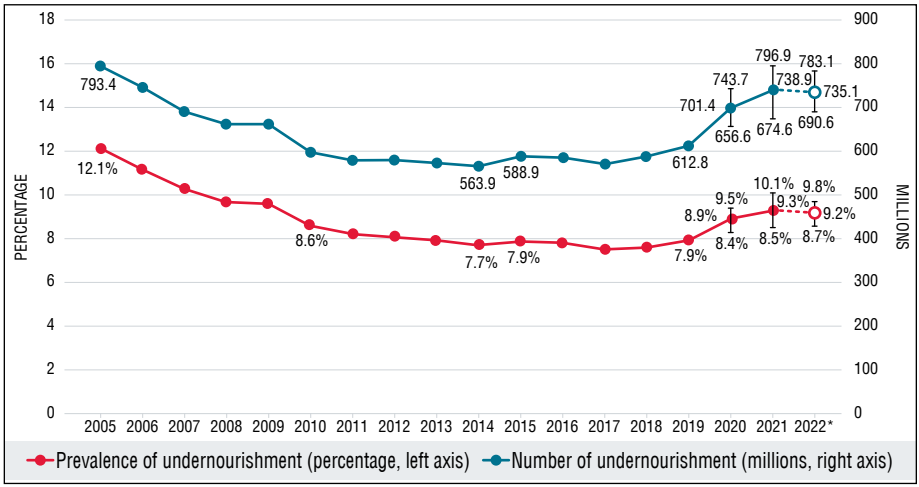
INCREASING CONCERNS ABOUT GLOBAL FOOD SECURITY

In 2022, around 735 million people suffered from hunger across the world, a figure that has barely changed from two decades ago. The prolongation of the global crisis caused by the coronavirus disease 2019 (COVID-19) pandemic and other shocks that affected the supply and availability of food and energy such as the armed conflict in Ukraine have prevented the recovery of indicators of food security to the levels achieved in the years prior to the previous pandemic (FAO, IFAD, WHO, WFP and UNICEF 2023, FSIN 2023)[1]. In 2022, 29.6% of the global population did not have access to an adequate diet and suffered from some degree of food insecurity. The prevalence of hunger and food insecurity were 1.3 and 4.3% higher respectively than in 2019.

[1] The conflict in the Middle East may also have an effect on food prices. Recent risks related to the security of shipping routes in the Suez Canal have caused a year-on-year decrease of 40% in the amount of wheat being shipped by that route. See https://www.wto.org/spanish/news_s/news24_s/agri_19jan24_s.htm

Climate change is also undermining levels of food security in several countries. Extreme climate events were the main cause of food crises in at least twelve countries in 2022, affecting more than 56.8 million people. This was double the number of people who suffered from food crises caused by climate events the previous year.

FIGURE 9.1 Prevalence of hunger across the world



* Projections based on nowcasts for 2022 are illustrated by dotted lines. Bars show lower and upper bounds of the estimated range.

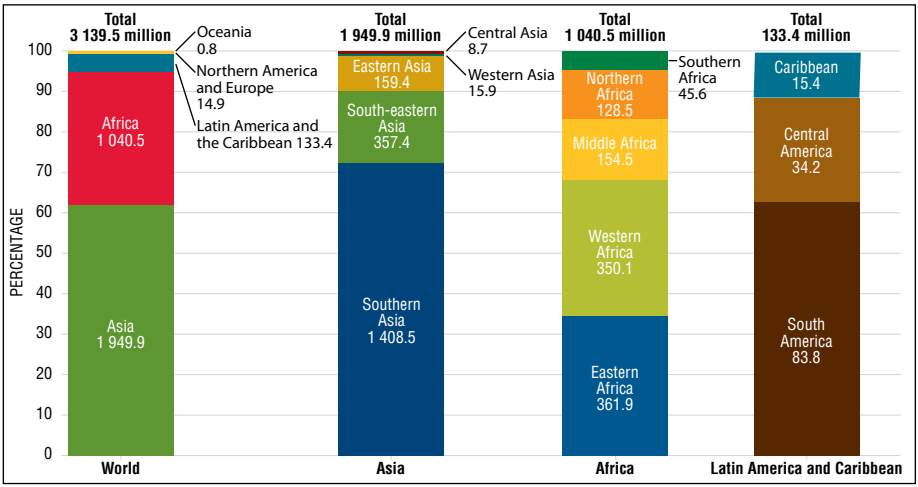
Source: FAO, IFAD, WHO, WFP and UNICEF 2023.

Although a substantial increase in the prevalence of global hunger has not been observed overall, significant regional differences exist. The increases in the price of food, agricultural supplies and energy that occurred in 2022 have increased hunger in Africa, West Asia and the Caribbean. These disruptions have also had wider geographic consequences on overall food insecurity (moderate and severe) and several regions have seen an increase in the number of people suffering from undernourishment: Caribbean (+0.9 pp), Africa (+0.7 pp), Central America (+0.4 pp), Europe (+0.4 pp), South America (+0.2 pp) and East Asia (+0.1 pp) (FAO, IFAD, WHO, WFP and UNICEF 2023).

The increase in the price of food has also affected indicators of global food security. In early 2021, the cost of a healthy diet rose by 6.7% compared to 2019 and rose by a further 4.3% during 2021.

The average cost of a healthy diet was USD 3.66 per person per day (PPD), with the highest costs being observed in Latin America and the Caribbean (USD 4.08 PPD) and the lowest in Oceania (USD 3.20 PPD). Disruptions to supplies and supply chains have caused an increase in the price of healthy diets across every region but have affected medium and low-income countries differently. Between 2020 and 2021 the cost of a healthy diet increased by 6.2% in countries with medium to low incomes, 5.1% in countries with medium to high incomes, 4.7% in countries with low incomes and just 2.1% in high income countries. That means a higher increase for regions and countries where a higher proportion of their population was already unable to afford a healthy diet.

FIGURE 9.2 ▶ The number of people unable to afford the cost of a healthy diet by region



Source: FAO, IFAD, WHO, WFP and UNICEF 2023.

Prior to the COVID-19 pandemic, concern was already mounting about difficulties with meeting food security goals, which had been stagnating for the previous five years. Subsequently, successive shocks struck the food markets, causing a pattern of price rises that have reduced the ability to afford food, especially among poorer communities. The ability to afford a healthy diet is a major issue. For example, it is estimated that more than two billion people suffer from an iron deficiency and 21% of children suffer from low levels of Vitamin A, which may be a direct cause of 800,000 deaths a year (*Ge et al.* 2021).

But more concerning still is that even if the system recovers to previous levels, it is estimated that almost 600 million people will still be suffering from hunger

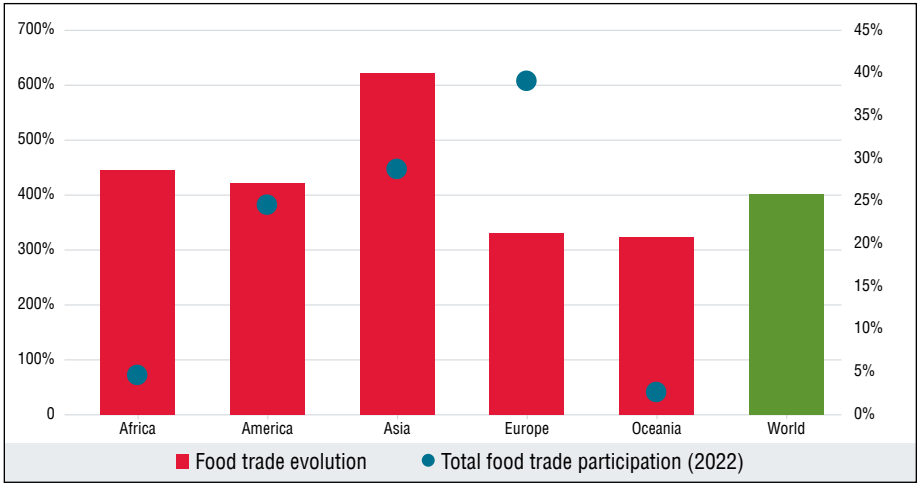
in 2030, with a significant decline in African countries where, since 2010, every sub-region has seen an increase in the number of people affected by insufficient calorie intake.

THE IMPLICATIONS OF TRADE FOR FOOD SECURITY

Since the start of the present millennium, global food exports have multiplied by five, rising in value from just over USD 300 billion to around USD 1600 billion (FAOSTAT 2023). During the same period, overall trade in goods grew by 289%, meaning that the share of the food trade (excluding fishing) rose from 5.1% to 6.5% this century (it rose further to over 7% in 2020).

Within that period, the share of developing countries in the global food and agricultural trade has risen to two-thirds of the overall total (FAO 2022). This has made several emerging economies significant actors and facilitated greater integration of low-income countries in global markets. However, despite growth rates exceeding the global average, trade exchange in some regions, such as Africa, represents less than 5% of the overall food trade.

FIGURE 9.3 Development of the food trade, excluding fishing, by region in the period 2000-2022 (in USD)



Source: Prepared by the authors, based on FAOSTAT.

The growth in volume of the food trade in recent years has reinforced pre-existing trends in trade balances by region. The exception was Europe which shifted from being a minor net importer to a positive figure of USD 50 billion while the Americas and Asia reaffirmed their positions as the leading net exporter and leading net importer respectively.

Box 1: *The contribution of the region's agrifood trade to food security*

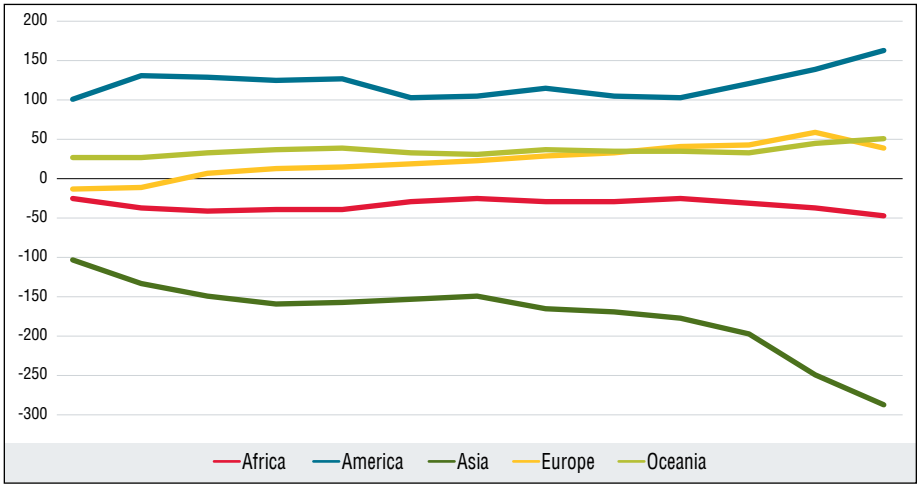
- The increase in production and exports in recent years has made the ***region the largest net exporter of food in the world.***
- ***Food sector exports from LAC on average in the period 2020-2022 represent 16%[2] of food exports globally*** and a **fourth of all exports from the region.** In addition, food exports from LAC saw an increase of 20%.
- The region contains some of the world's leading producers and net exporters of food, especially Argentina, Brazil, Chile, Costa Rica, Ecuador, Nicaragua, Paraguay, Peru and Uruguay, who have become key suppliers of "provisions" at a global level[3].
- The most prominent food products exported by LAC in the period 2020-2022 were soybeans (15%), soybean oil cake (7%), corn (5%) and coffee (5%).
- In addition to its leading role as a net exporter, LAC has consolidated its place as a significant global producer of fruits and vegetables. **A third of the fruit and a quarter of the vegetables produced in the region are exported.** In just a few years, LAC has become a major player on the global fruit and vegetable market, contributing to a nutritious diet and food and nutritional security globally.
- As regards **Central America**, food exports in 2020-2022 represented an average of **7% of overall food exports from LAC** and 1% of the global food trade. During that period, the region recorded 13% growth in food exports overall.
- The most prominent products exported from Central America in the period 2020-2022 were coffee (15%), fresh bananas (12%), palm oil (7%) and cane sugar (6%).

[2] IICA, with data from the Trade Data Monitor, consulted in February 2024

[3] According to the index of net exports of food per capita (Arias, J; Chavarría, H; Salazar, E 2021).

In that regard, in 2022 the East Asia sub-region accounted for 81% of Asia's food trade deficit, with the sub-region increasing net food imports to USD 147 billion since 2000 while South America, with net exports of USD 158 billion, represented most of the positive trade surplus from the Americas, an increase of USD 80 billion since 2000)[4].

FIGURE 9.4 Development of net food exports in the period 2000-2022 (in billions USD)

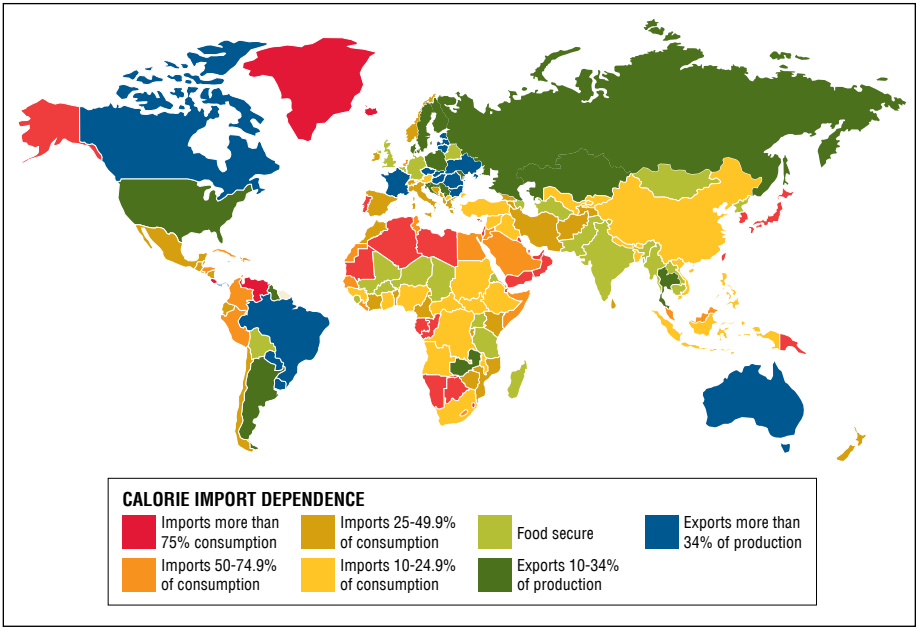


Source: Prepared by the authors, based on FAOSTAT.

The importance of trade to food security is reflected by the share of imports in global diets. Today, it is estimated that around 25% of the calories consumed across the world are derived from imported food (FAO & IFPRI 2023). In some regions, such as North Africa and the Middle East, imports account for up to 65% of calories consumed internally (OECD and FAO 2022). Even in LDCs that are not so well integrated into the global trade system, the supply of food imports is vital for food security (ITC 2023).

[4] Net exports from Central America overall achieved a positive balance of USD 16.9 billion, a favorable shift in the food trade balance of 465% during said period.

FIGURE 9.5 Dependence on imported calories expressed as a percentage of local output

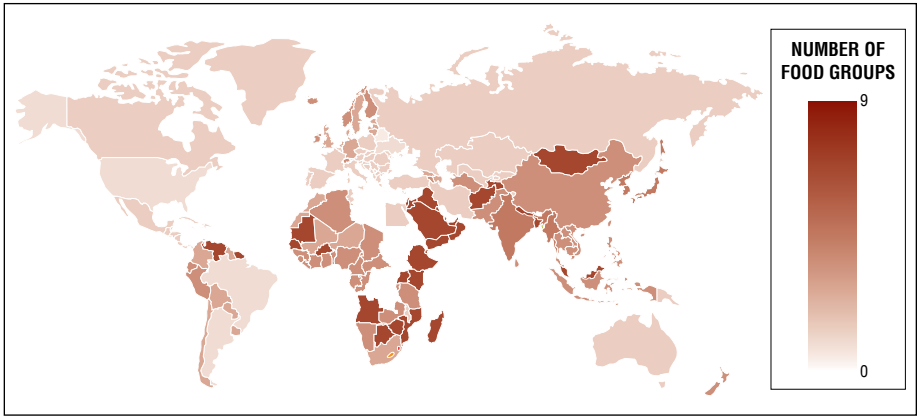


Source: Van Berkum 2022.

The literature on the benefits of trade for food and nutritional security is extensive and growing (Dithmer and Abdulai 2017; FAO and IFPRI 2023; Ge *et al.* 2021; ITC 2023; Laborde, Piñeiro and Swinnen 2023, Springmann *et al.* 2023). Through more varied supply, trade favors healthier, more balanced diets. It has even been suggested that trade can eliminate nutritional security in every country for some specific nutrients such as calories, niacin and zinc. However, although it has positive effects on diet quality, trade will not be sufficient to satisfy global needs for other micro-nutrients such as Vitamin A, folic acid, riboflavin and iron (Ge *et al.* 2021). In these cases, other means are necessary such as a change in diet and increases in local production of some food groups.

Currently, barely any country is able to supply itself sufficiently in terms of quantity and variety to ensure a healthy diet. Laborde, Piñeiro and Swinnen (2023) analyze local supplies of food adjusted for losses and waste across the nine food groups necessary to ensure an adequate diet and found that on average there are local deficiencies in over five food groups and that 75% of countries have deficiencies in at least four of these groups.

FIGURE 9.6 The number of food groups whose supply is deficient,* by country



*Adjusted for food loss and waste.
Source: Laborde, Piñeiro and Swinnen 2023.

Although its virtues have been widely documented, it is important to recognize that trade is not a foolproof tool for resolving global food security on its own. In fact, in the short term, trade liberalization can negatively affect food security due to the impact of external shocks to the system that can disrupt the supply, availability and prices of food in internal markets, or due to the effects of external competition upon the income and livelihood of farmers, especially the more disadvantaged among them (Ge *et al*. 2021, Van Berkum 2022).

In addition, increases in food imports can also adversely affect the quality of diets, especially when there is an influx in products of low nutritional quality; those with high sugar and fat contents (Ge *et al*. 2021, Piñeiro *et al*. 2023, Springmann *et al*. 2023). Similarly, trade can cause undesirable changes in the use of the land or exacerbate the over-exploitation of natural resources (Van Berkum 2022).

But perhaps the most important factor is that, given that no more than 10-15% of food produced locally is sold internationally, the food security of most countries will continue to depend on their ability to sustainably increase their output and make their local food systems more efficient.

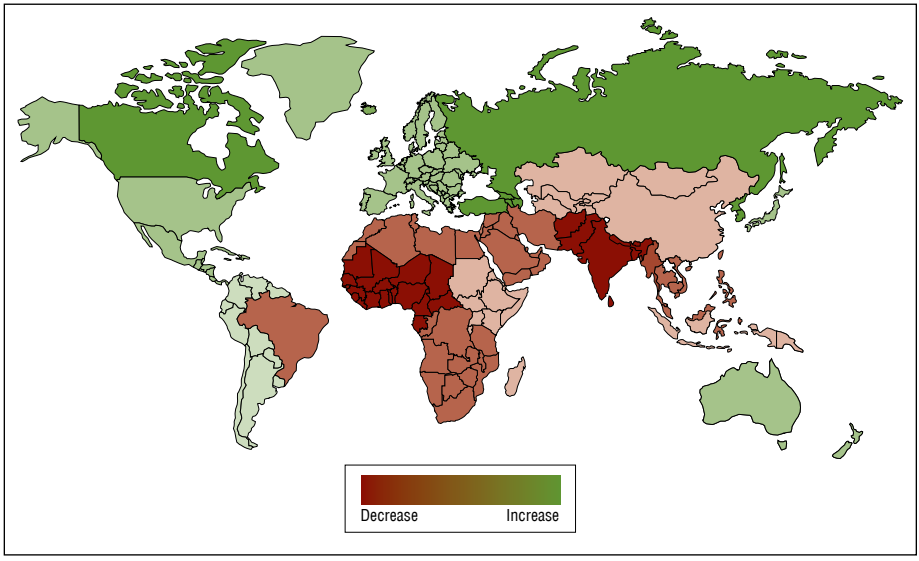
However, misleading perceptions can lead to erroneous policies. On the one hand, it is unlikely that self-sufficiency shall ever be an adequate policy for ending food insecurity, not just because it is impossible to ensure the varied supply required by a healthy diet but also because self-consumption is not the driver of food production even in countries that aren't well-integrated in the

trade, as is the case of different countries in Africa. Even here, consumption of home-produced food in rural areas does not exceed, on average, 37% of total food consumption. (FAO, IFAD, WHO, WFP and UNICEF 2023).

On the other hand, and perhaps more importantly, one should not lose sight of the fact that factors such as climate and the availability of land and water have a direct impact upon the production and trade of food. Given that the distribution of natural resources and demographic pressure are not equal among countries, trade is a tool that allows for the improvement of productive, environmental and social efficiency through the flow of goods from countries with surpluses to those with deficits, thus increasing the overall availability of food, reducing prices, favoring food security and mitigating environmental impact (Elverdin *et al*. 2022, Piñeiro *et al*. 2023, OECD-FAO 2023).

In fact, the impact of climate change on food production is not uniform across the world, and it is expected that the regions that experience the greatest food and nutritional deficits today will be those which suffer the greatest losses by 2050 (FAO 2018), enhancing the importance of trade in improving food security indicators in these regions.

FIGURE 9.7 ▸ The impact of climate change on agricultural production by 2050 (relative to baseline)



Source: FAO 2018.

Thus, even at a time when technological transfer is helping to close the gap in agricultural productivity and reduce demographic differences, thus supporting the distribution of natural resources for sustainable food production, the food trade will continue to be an essential factor in achieving global food security (OECD-FAO 2023)[5].

In fact, given the increase in trade, global food markets are now more resilient at withstanding shocks to the system. And although markets for individual products are more vulnerable to unforeseen events and pass on changes in price more quickly (FAO 2023), the increasingly unpredictable climate means that domestic production tends to suffer more greatly than the global market, so greater access to external markets provides greater stability (FAO 2022, OECD-FAO 2023).

AGRICULTURAL MARKETS CONTINUE TO FACE RESTRICTIONS

The significant growth in the food trade in recent years has been driven by the appearance of new global actors, especially developing countries such as Brazil, China, Indonesia, Argentina and others. The participation of these countries was supported by trade regulations and investment established by the WTO, which encouraged a fall in food importation tariffs of about 27% (OECD-FAO 2023), a reduction in trade-distorting subsidies (as a proportion of gross domestic product) and an increase in trade agreements that facilitate and encourage trade between the signatories.

Given the slow progress of multilateral treaties, the proliferation of bilateral (and multilateral) trade treaties has shown a trend toward trade regionalization, weakening the process of globalization. More recently, with the increase in armed conflict and trade wars (such as the conflict in Ukraine or the geopolitical dispute between the USA and China), “friend-shoring” is a key factor in explaining the increase in the flow of trade (OECD-FAO 2023, UNCTAD 2023). Without a doubt, this regionalization of trade increases the

[5] It is estimated that by 2050, between 1.5 and 6 billion people will depend on trade to achieve food security (Ge *et al.* 2021).

food vulnerability of LDCs, which are already showing a greater concentration of imports from just a few countries[6]. Other factors that favor regionalization include: nearshoring, in which operations are relocated to a nearby country, reshoring, also known as onshoring, which involves moving a production operation that was once located overseas back to its original country, and micro-sourcing, understood as remote de-location spread among different cells and individuals.

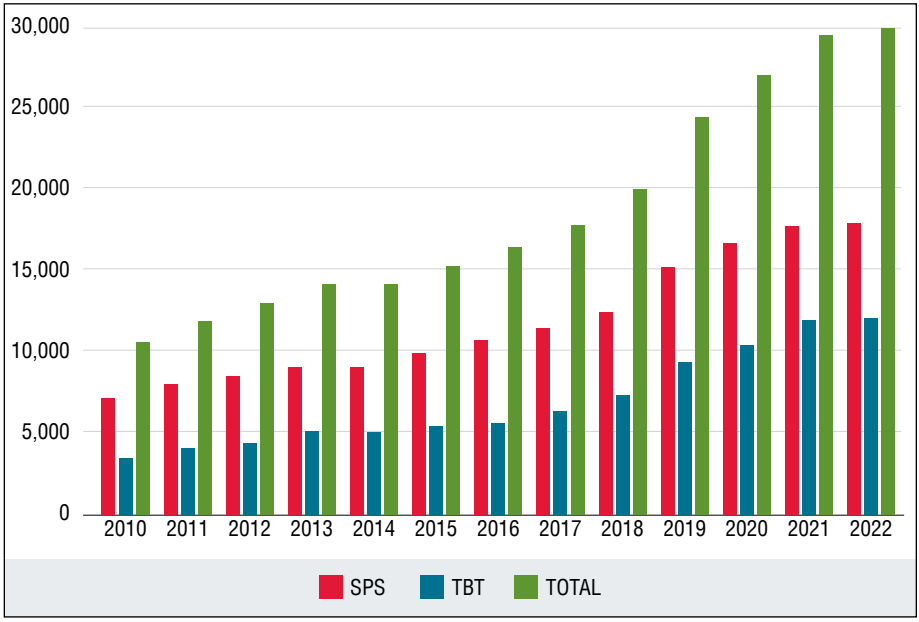
In the context of these new dynamics, trade policies in agricultural markets have been a regularly used tool and the main source of disruption of food prices. As a consequence of the COVID-19 pandemic and the conflict in Ukraine, trade restrictions on food markets and agricultural supplies have markedly increased. At least 19 countries have implemented 27 measures forbidding exports and 9 countries have implemented 17 measures restricting exports (WB 2023).

Similarly, almost 100% of the food trade is subject to non-tariff measures (NTMs), compared to 40% of other goods. Barriers to trade include sanitary and phytosanitary measures (SPS), Technical Barriers to Trade (TBTs) regarding packaging and labelling, animal welfare, customs procedures and trade requirements such as inspections prior to shipping, among others. Although NTMs are established for legitimate regulatory purposes such as ensuring the health and wellbeing of consumers and protection of the environment, their fulfillment has an economic cost and additional technical requirements that in some cases can be prohibitive, especially among small producers. In part, these regulations have favored the concentration of the agricultural and food trade among a few large companies that have greater capacity to meet the varied requirements of different markets (Van Berkum 2022).

In recent years, NTMs have been increasingly used to support a wide range of political priorities and domestic development strategies, becoming a key factor in international commerce. The number of SPS measures and TBTs applied and or initiated has increased sharply since 2010, from a little over 10,000 to 30,000 by 2022.

[5] LDCs have 77 food suppliers, a figure appreciably lower than the 117 suppliers to developing countries and the 160 suppliers to developed countries (ITC 2023).

FIGURE 9.8 Total number of non-tariff measures (SPS and TBTs) applied to agrifood products in the period 2010-2023 as reported to the WTO (cumulative total)



Note: The figures are for measures initiated and in force regarding live animals (S01), vegetable products (S02), vegetable fats and oils (S03) and food preparations, beverages and tobacco products (S04).

Source: Prepared by the authors, with data from the WTO.

NTMs thus have a profound impact on the structure of the food trade between countries and companies. The use of the precautionary principle in the application of barriers, especially by developed countries, has had a negative impact on exports from developing countries into those markets (UNCTAD 2018, Gourdon *et al.* 2020).

Even more concerning is the fact that fulfillment of this kind of measure mainly affects supplies to LDCs. The ITC (2023) estimates that over 57% of food importers to LDCs have been affected by some kind of procedural restriction or obstacle that might adversely affect supply, availability and price in their markets. This figure is significantly greater than the 34% found in developing countries and the 11% faced by importers to developed countries. However, it is important to make clear that most of the issues encountered in LDCs would seem to be local in origin and only 7% are due to difficulties in the supplier countries.

In this regard, it is important to emphasize the need for these measures to be based on science, that their implementation and approval processes be transparent and easy to access, and that technical and economic support be provided to facilitate fulfillment, especially for small producers, exporters and importers from developing countries. Aligning regulatory priorities and working toward greater harmonization of NTMs is an effective means of ensuring food quality and health while also reducing fulfillment costs. In most cases, trade agreements include greater technical cooperation on regulation, standards and mutual recognition of registration but it is also necessary to make progress in the multilateral sphere as not every country has the technical capacity and political support to implement the multiple and complex processes of bilateral and regional negotiations.

THE ROLE OF STANDARDS IN THE GOVERNANCE OF THE INTERNATIONAL FOOD TRADE

In recent decades, public and private standards on quality, neutrality and environmental and social sustainability in food production have grown more widespread. Through initiatives guided by these principles, global supply chains can meet better standards and take advantage of trade opportunities that emerge from the fulfillment of these conditions. However, the evidence regarding who benefits from the imposition of standards by importing markets is ambiguous as the beneficiaries of their implementation are not just determined by the nature of the measure but also how it is implemented (Van Berkum 2022). Simultaneously, the cross-border spread of standards and/or regulations which may be beneficial in some aspects, can also bring great pressure to bear on food production, aggravating global food insecurity (Beckman *et al*. 2020).

It is not only public regulations that have increased, but there has also been a sharp increase in the standards and demands required as part of private contractual agreements. According to Elverdin and Papendieck (2021), in 2021 the number of regulations that referred solely to environmental sustainability was around 264 standards in 194 countries and close to 457 ecological labels in 199 countries, with agricultural products and processed

foods the most affected. The increase in the number of certified products was driven mainly by large retail companies and new public regulations.

Because all manners of fulfillment require the implementation of new processes greater costs affect the weakest links in the value chain the most, meaning that the implementation of these standards should not just be supported by scientific evidence but also financial and technological instruments in order to transform production systems (Van Berkum 2022).

Obviously, WTO rules allow members to take measures to protect the environment, but they cannot be implemented if they restrict trade unjustifiably and their effective implementation represents discrimination against producers and exporters. Given the increased concerns about food security, the global trade-offs of these kinds of policy should be evaluated.

THE WTO AGENDA ON FOOD SECURITY

Increased frustration regarding the stagnation of the struggle against global hunger has given rise to hope that some progress might be made as part of the WTO's agenda. Previous Ministerial Conferences achieved a few consensuses as part of the Agreement on Agriculture such as the elimination of export subsidies (MC10, Nairobi 2015) and the elimination of restrictions on exportation of food acquired for humanitarian purposes, as well as others related to food security such as the signatures of the Agreement on Trade Facilitation (MC9, Bali 2013) and the Agreement on Fisheries Subsidies (MC12, Geneva 2022).

However, it was at MC12 that countries adopted for the first time a ministerial declaration on responses to food insecurity and tasked the Committee on Agriculture with implementing a program of specific activities to respond to food emergencies in LDCs and developing countries that are net importers of foodstuffs.

The development of a working program soon began and in November 2023 its second revision was concluded. Following the relevant negotiations, members agreed to address four areas: i) access to international food markets, ii) import financing, iii) the resilience of agricultural production and iv) related horizontal issues.

The full conclusions of the deliberations and recommendations can be seen in the report by the coordinator of the working group[7]. Here, they highlight the need for exporter countries to evaluate the possibility of implementing differentiated policies regarding temporary restrictions on exports in order not to affect the food security of the countries that depend upon them and where these exports would be difficult to obtain from other markets. They also recognize the possibility, within WTO guidelines, of using autonomous tariff contingencies during times of emergency without this affecting the consolidated tariffs for Most Favored Nations (MFN).

In addition, with regard to the financing of imports, the working group recognizes the fact that the Nairobi Decision regarding competition for exports includes provisions regarding differentiated treatment for LDCs. In that regard, the proposal that the WTO Working Group on Trade, Debt and Finance carry out a focused study to examine the specific concerns of LDCs and other net food importers regarding the financing of food imports is interesting. Similarly, the proposal to increase cooperation with other multilateral organizations with regard to food security through the creation of a group of experts to advise the committee and warn of critical situations while also enhancing the resilience of food systems in LDCs is also encouraging.

Following over a year of work and dialogue, the agenda included in the report reflects the consensuses on which it would be beneficial to keep working in order to achieve wide-ranging and lasting agreements. However, the urgency of the global food situation and forecasts for the immediate future, the most optimistic among them included, make it necessary to accelerate and expand the discussion as soon as possible.

For example, access to financing for food purchases is an ongoing demand from LDCs. Here it would be advisable not to undo the progress made on subsidies of exports but rather promote the use of market instruments that reduce and avoid additional distortions of agricultural market prices. The formation of a loan guarantee system within a multilateral regional financial structure applicable to food imports would allow importers to LDCs access to import finance mechanisms as well as futures contracts and options that provide them with coverage for potential price variations[8].

The creation of a “rotating fund”, a proposal that first arose two decades ago, was recently revived by Sri Lanka during debates over food security at the

[7] Unofficial WTO document RD/AG/120/Rev.2 from November 15, 2023.

[8] The FAO has been lobbying for the creation of a food import financing facility (FIFF) for importers in LDCs. See https://www.fao.org/markets-and-trade/resources/news-events/fiff-event/es/

WTO[9]. The creation of a rotating fund would help to provide a rapid response to the financing needs of food importers in LDCs. It is important that the nature of the fund should not be forgotten; it should provide favorable terms for the importation of products that are priority needs in LDCs. The refinancing of the fund should be subject to the payment of loans taken by the importers meaning that efficient automatic mechanisms must be developed for risk assessment that allow for a rapid response to hypothetical crisis situations but do not compromise the fund when it receives funding applications in the future.

The issue of a lack of technical capacity and deficiencies in food import processes was also mentioned several times by different countries in their contributions. These countries have experienced difficulties with the instrumentation of the Agreement on Trade Facilitation. It would thus be beneficial to provide a mandate and financing to the LDC Unit of the WTO Secretariat to work with and train countries in the instrumentation of the Agreement and provide support on the design, development and implementation of electronic documentation, trade certification procedures and evaluation of regulatory conformity, harmonization and simplification, as well as on improving the efficiency of customs operations, among other aspects.

Without a doubt the outcome of these conversations raises hopes that progress will be made in achieving concrete results that provide mechanisms with which to address specific food crises. However, it is necessary to continue expanding the agenda of the negotiations in order to improve access to markets, increase transparency and minimize interventions that undermine their stability.

Proposals were also made to flexibilize long term negotiations at the WTO, such as those regarding restrictions upon exports. In this case, it was suggested that progress be made on an agreement between the main exporters and importers of food aimed at not excessively restricting the global supply of food. This initiative would see exporters guarantee a minimum supply and importers limit their purchases during periods of food crisis. The idea of a grand bargain between net exporters and importers has already been presented by

[9] WTO, Room Document RD/AG/107 of April 18, 2023.

Huang *et al.* (2018) at the G20 in Buenos Aires and was revived by Boüet and Laborde (2021) during preparations for MC12. Given that no more than 15 countries represent over 50% of net exports and imports, setting up a working group at the WTO that facilitates the identification of the necessary incentives and consensuses could be easy to arrange and ideally lead to larger scale agreements[10].

The question of public food stocks was also mentioned during the negotiations. However, the proposal to allow countries to raise national public stocks to the level of a kind of global public stock that is immediately available for sale in crisis situations, although praiseworthy in humanitarian terms, will surely encounter significant obstacles given the complexity of negotiations and open-ended agenda, making rapid progress unlikely.

Partially related to the above, an issue of increasing concern is the availability of supply and the volatility of the prices of critical agricultural supplies such as fertilizers. Until the conflict in Ukraine, discussions regarding global food security had not paid much attention to these markets, essentially because they were related to energy. However, 50% of global output depends on fertilizers, so greater attention should be paid to the area (ITC 2023). Although 45% of global output is sold externally, supplies are highly concentrated in a few countries. That is why improving the transparency of these markets is increasingly important to the struggle to achieve food security. Making progress with the incorporation of fertilizers into the Agricultural Market Information System (AMIS) will allow for the generation of better political responses. Similarly, as is true of food purchases, public purchases of fertilizers generate market uncertainty and cause extensive price distortions. A large part of these purchases are aimed at subsidizing producers (domestic support), but these interventions directly affect the global supply market. It is advisable that a special group be formed at the WTO tasked with encouraging countries that make use of public purchases to facilitate supplies to their producers to offer more notice regarding the quantities and dates of these transactions in order to reduce price volatility.

In addition, the issue of domestic support also has a significant effect on food security among LDCs. The current framework for agricultural support is ineffective in addressing the multiple challenges faced by food systems (Gautam *et al.* 2022). In many developed countries, domestic support is shifting from production objectives to environmental objectives. However, this may have significant consequences for global food security (Beckman *et al.*

[10] The proposal was presented by Martín Piñeiro during the WTO Trade Negotiation Symposium on the Agriculture Policy Landscape, held in June 2018. For more details, see: https://www.wto.org/english/tratop_e/agric_e/symposium_ag_policy_landscape_e.htm

2020), as has been noted by several large companies in the private sector as they do not have the necessary support for upriver certification of the value chain (ITC 2023). Thus, international cooperation should be encouraged on providing better information on the impact of domestic support on food security and the environment and reviving the agenda of fixed trade rules at the WTO deriving from current trade negotiations, setting limits on domestic support in relation to food security and the environment.

Finally, there is the issue of market access, where the explosion of the number of NTMs and the most vulnerable exporters and importers' increasing difficulty in fulfilling them cause the exclusion of said parties and greater concentration overall. This has been especially exacerbated by the proliferation of public and private regulations that evaluate different parameters for environmental sustainability and act as a non-tariff barrier to market access (NTB). Although countries can take measures to protect the environment, it should be required that these measures be formulated according to scientific criteria and the trade-offs of these mechanisms be evaluated given that one size fits all models are not valid for global food production where agricultural and ecological conditions, farming methods, productivity and environmental impact differ greatly.

In turn, given the proliferation of private standards that affect trade, the member countries of the WTO should encourage the inclusion of the issue on the agenda. As Elverdin and Papendieck (2021) suggest, a group should be set up to monitor and harmonize private regulations and calculation methodologies between the WTO, the ITC, UNCTAD and the ICC, aimed at encouraging transparency and science-based decisions.

FINAL REMARKS

Given the continuing increase in population levels, the definitive solution to world hunger will be derived from an increase in productivity and global agricultural production. To achieve this, technological exchange, research, innovation, infrastructure, access to financing, regulatory frameworks etc. are all key. It is also of vital importance to increase the availability of food through the reduction of loss and waste.

Sustainable production must consider economic, social and environmental aspects if sustainable agriculture is to be achieved and each region should develop its own model in accordance with its environmental conditions, soil

structures, natural resources, culture and good practices among the inhabitants of their rural areas. Trade policies should recognize the diversity of sustainable production models to facilitate commerce which is also a key element of global food security.

International trade helps countries to develop, improves people's quality of life, encourages innovation and is essential for ensuring food security and the income of small farmers.

Furthermore, international trade helps producers to access innovation and new tools that facilitate access to international markets, especially among developing countries.

Technological innovation in the agri-food sector can genuinely provide the necessary tools with which to produce safe, nutritious and accessible food for the global population while also contributing to the fight against climate change.

However, even adequate incentives for production and the reduction of waste will not be enough to ensure food security and global environmental sustainability. The relevance of trade to global diets has and will continue to increase, especially among LDCs where 63% of calories consumed are derived from imports (ITC 2023). For this reason, increasing multilateral cooperation is critical to facilitating access, increasing transparency, strengthening the food trade and reducing the food insecurity of the most vulnerable members of the population.

Nonetheless, the situation in the past twenty years has been characterized by the virtual stagnation of multilateral negotiations and the simultaneous proliferation of regional and bilateral trade agreements, whose number has

risen from 25 in 1990 to over 350 in 2022. These agreements, while offering trade facilitation opportunities to the signatory countries, created trade ties that undermined the participation of non-signatory nations, generating market fragmentation and increasing concerns over discrimination and exclusion, especially among LDCs.

The completion of some negotiations that had been ongoing at the WTO and the inclusion of concerns linked to food security offer some hope of making new progress in the medium term.

Given the urgency to resolve the food crisis, new innovative forms of negotiation should be adopted but this does not mean ignoring the need to promptly complete negotiations that remain open, or to find consensus on new issues on the agenda. For this reason, WTO members should expand their work in some basic areas, including the following:

- Improving market access, especially increased monitoring of NTMs, in order to ascertain that they are truly justified, are not discriminatory and do not become barriers to trade.
- Making progress in regulatory convergence of NTMs, in order to facilitate LDCs´ participation in trade.
- Including private regulations and standards on the WTO agenda.
- Concluding negotiations on restrictions to exports. However, given the complexity of the agenda and the food emergency, temporary negotiations could be advanced within the WTO among major net importers and exporters of foodstuffs. An agreement between them would reduce volatility and bring greater certainty to markets.
- Moving forward with “repurposing” discussions on the domestic support agenda.
- Making progress with negotiations on public stock holdings.
- Encouraging the inclusion of fertilizers within the AMIS.
- Encouraging a greater degree of transparency on the global fertilizer market. To achieve this, a fertilizer working group could be created featuring the participation of the main exporters and importers and especially those countries that use external markets for public purchases of fertilizers.

Similarly, the demands presented by LDCs in the working program encompassed by Article 8 of the Marrakesh Decision, especially with

regard to facilitation of access to financing for food imports, training in the instrumentation of more modern import processes and the increase in the productivity and resilience of food systems should be addressed.

In addition to making progress in attending to these extremely pressing needs, the development of food systems requires more holistic, integrated visions that exceed the Agriculture Agenda as the efficient provision of food depends on an increasing number of factors. Thus, it is a priority to increase cooperation within the WTO and between the organization and other multilateral agencies linked to agricultural production, rural development, technological innovation, logistics, financing and investment. In addition, it is necessary to include the private sector within this working framework as both producers and processors and traders of food, especially given the large proportion of intra-industry global trade.

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10

PROPOSED PATHWAYS FOR MOVING FORWARD

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In Chapter I, the introduction of this book, we present a succinct description of the many difficulties that the World Trade Organization (WTO) and its member countries have encountered over the last decade in their attempts to advance in negotiations toward agreements that could contribute to more open and transparent global trade and the discussions taking place as a result of these difficulties. Starting from this context, the rest of the book aims to contribute to three important themes that have emerged from recent discussions in the WTO. The selection of these themes and the authors' proposals to solve these themes are influenced by the needs and perspectives of Latin America, specifically the region's food-exporting countries.

The first theme, summarized in Chapter II, deals with the geopolitical transformations that have occurred during the last two decades, mainly after the 2007/2008 financial crisis, and the ways in which these changes have conditioned and changed the global trade environment. These transformations stimulated substantive changes in the economic and trade policies of the major economies and growing economic and political fragmentation at the global level, especially in relation to the main trading economies. They also led to a weakening of multilateralism in general and specifically the multilateral trade rules that had been laboriously developed within the WTO institutional context during and immediately after the Uruguay Round Agreement on Agriculture (AoA).

In this context, it is important to emphasize that the response to the new, more complex and difficult geopolitical context should be, as pointed out by Ngozi Okonjo-Iweala, to "reglobalize" instead of "deglobalizing[1]." To reglobalize will require new ideas and actions to protect and enhance global trade in these new geopolitical circumstances, as well as a revitalized WTO that includes new ways to interact, new types of trade agreements, and the inclusion of new themes in the negotiation process.

The second theme, discussed in Chapter III, is the recognition that even in the context of this more difficult and less productive environment for agricultural trade negotiations, some members of the WTO have maintained an interest in advancing a few select issues that belong to the traditional three pillars of agricultural negotiations. The subjects selected in this process of advanced negotiations and agreements share two major attributes: they were considered important and also had certain characteristics that increased the likelihood of reaching a successful negotiation.

[1] Okonjo-Iweala, N. 2023. "Why the World Still Needs Trade: The Case for Reimagining–Not Abandoning-Globalization." *Foreign Affairs, July/August.*

Chapters IV, V, VI, and VII address some of these subjects, aiming to present a balanced view of the challenges as they now stand in the negotiation process. These chapters also strive to put forth ideas and perspectives that could be useful for countries interested in moving forward on these negotiations.

Finally, the third theme, dealt with in Chapters VIII and IX, relates to the growing intersection of environmental and climate concerns with multilateral trade. This relationship creates difficulties for trade, and consequently for global food security, but at the same time, it generates new opportunities for countries that are net food exporters.

The main contents of these eight chapters are summarized below:

Chapter II: In the aftermath of the Soviet Union's dissolution in the 1990s, a significant shift in global affairs occurred, with the United States emerging as a dominant force, bolstered by key allies such as the European Union (EU), Japan, and Australia. This period also witnessed a surge in economic interdependence driven by trade and the development of global value chains, which was particularly accelerated by China's rapid economic growth and similar trends in other nations such as the Republic of Korea.

Agricultural trade rapidly increased after 2006, primarily due to heightened food demand from China. Despite economic uncertainties, agricultural trade has maintained a steady proportion of global trade, reflecting stable food demand and trading needs. However, ongoing geopolitical shifts, technological advancements, and climate change imperatives are reshaping global trade dynamics.

The evolving geopolitical landscape, marked by escalating competition between the United States and China, is giving rise to economic alliances and conflicts that affect global trade. Notably, trade policies are veering toward protectionism, which is evident in the adoption of industrial policies by the United States and EU. Consequently, countries are progressively decoupling, favoring alliances aligned with shared interests. "Friendshoring," a concept emerging from this, is gaining traction, with political affiliations reshaping value chains.

Despite these changes, preserving global trade remains crucial. Navigating this landscape requires adapting to geopolitical realities and sustainability imperatives. However, the traditional multilateral framework faces challenges. Addressing these will require recalibrating trade policies and institutions, fostering bilateral and plurilateral agreements, and dismantling subsidies that hinder sustainable production. Addressing these priorities is essential for a resilient agricultural trade environment that is aligned with geopolitical shifts and sustainability goals.

Chapter III highlights the urgent need to strengthen the multilateral trade system and its governing body, the WTO. There is a consensus among international trade stakeholders on the necessity of enhancing the WTO's negotiating capabilities to achieve results on various trade agenda items, particularly agriculture. The WTO's establishment in 1995 marked a pivotal moment in defining international trade rules, especially for agrifood trade. However, recent geopolitical and economic events have strained global value chains, highlighting the need for a reformed and robust multilateral system. Issues such as protectionist measures, geopolitical realignments, and regulatory convergence require urgent attention. The Americas, particularly Latin American and Caribbean countries, have significantly benefited from multilateral trade and should actively support efforts to strengthen the WTO. An integrated approach that includes national production, international trade, science and technology development, and climate change adaptation is essential for formulating effective public policies. Modernizing the WTO to incorporate innovative disciplines related to sustainability and food security is crucial for ensuring that developing countries, especially net food exporters, can effectively participate in international trade.

Chapter IV looks at recent developments in the WTO's agricultural negotiations, with a particular focus on domestic support, public stockholding (PSH) for food security purposes, and export restrictions, and their linkage to sustainable development goals. Various submissions and discussions highlight the importance of these issues, especially regarding their impact on food security, climate action, and healthier diets. The chapter also addresses

other negotiation issues such as export competition, the special safeguard mechanism, market access for agricultural products, and cotton, all of which are connected to broader sustainability concerns. Additionally, it notes efforts to enhance the effectiveness of measures concerning the negative effects of reforms on least-developed countries (LDCs) and net food-importing developing countries by increasing access to international food markets and improving their agricultural resilience. Chapter IV concludes by discussing the significance of integrating sustainability objectives into the WTO's agricultural negotiations to promote global food security and address challenges related to climate change and extreme weather events.

Chapter V discusses the contentious issue of PSH programs within the WTO AoA. These previously uncontroversial programs faced scrutiny as support levels threatened to exceed domestic commitments. The Bali Ministerial Conference (MC) in 2013 introduced a temporary "peace clause" to shield existing programs from disputes. However, a permanent solution has eluded consensus in subsequent MCs, hindering progress in WTO negotiations. Various proposals have been made, including exempting PSH expenditures from calculation or adjusting the formula for market price support. Concerns persist over the impact of PSH on production and trade, particularly for countries with significant stockpiles and exports. Resolving the impasse remains uncertain, but updating the external reference price calculation is suggested as a potential technical fix, albeit an imperfect one.

Building a sustainable global food system requires unified efforts from the international community, with the WTO serving as a crucial platform for dialogue and negotiation. Despite a decline in average domestic support among OECD[2] countries after the Uruguay Round, reforms have stalled since 2008. The rise in trade tensions and the impact of COVID-19 have led to higher levels of support, with global agricultural subsidies now around USD 600 billion annually, mainly in a few countries. Repurposing agricultural subsidies has become essential to address the complex challenges of global food systems, including food security, nutrition, environmental sustainability, and livelihoods. Using MIRAGRODEP, a global computable general equilibrium model, Chapter VI examines the necessity of reducing and removing trade-distorting domestic support within WTO negotiations. It explores various policy scenarios and their impacts on food security, nutrition, and climate outcomes. The findings suggest that cross-border redistribution of support significantly benefits low- and middle-income countries, promoting a more sustainable global food system. This highlights the need for a substantial

[2] Organization for Economic Co-operation and Development

rebalancing of policies worldwide. The chapter also shows that merely eliminating existing distortions won't fully resolve the challenges of global food systems, underscoring the importance of investing in productivity gains and bridging productivity gaps.

Chapter VII covers the topic of export barriers, including prohibitions, taxes, quotas, and licenses imposed by countries for various economic and noneconomic reasons. Despite the creation of agreements and organizations such as the General Agreement on Tariffs and Trade and the WTO, export restrictions received less attention than import tariffs. These measures are used for diverse policy objectives but often have negative impacts on both domestic and global economies. Recent global crises have led to a surge in export restrictions, exacerbating market volatility. The current WTO framework lacks effective mechanisms for dispute resolution and transparency in notifying trade measures. The authors suggest the need for reform to address these challenges and propose alternatives to export restrictions, such as export duties, to promote stability in global trade.

Chapter VIII discusses the role of voluntary sustainability standards (VSS) in promoting sustainable development within the context of international trade. It emphasizes the increasing urgency of addressing the nexus between trade and sustainability due to environmental challenges and the need for coordinated action. VSS, which specify sustainability requirements for various actors in supply chains, are highlighted as important tools for guiding buyers and producers toward better social and environmental outcomes. The chapter outlines how VSS works, their potential benefits for trade, and the challenges they face, particularly for adoption by developing countries and small-scale producers. It also explores the complex landscape of VSS, including their proliferation and lack of harmonization, and the need for greater coordination and mutual recognition systems. The WTO's efforts to incorporate environmental concerns into trade agreements and discourse are discussed, along with its actions related to agrifood trade

and environmental sustainability. The text concludes by addressing the lack of a global governance framework for VSS and the need for trade-related incentives to promote their adoption.

Chapter IX addresses how the completion of select WTO negotiations and the inclusion of food security concerns offer hope for progress. Key agreements reached in past MCs and recent initiatives to address food insecurity, such as the ministerial declaration at MC12, have led to specific programs to support LDCs and food-importing developing countries. Proposals include differentiated export policies, autonomous tariff contingencies, and a rotating fund for food import financing. Addressing technical capacity and import process deficiencies is also crucial. Despite the urgency of the global food situation, innovative negotiation forums are needed, but ongoing negotiations must be completed, and new issues addressed. These include improving market access and regulatory convergence of nontariff measures and enhancing transparency in the fertilizer market. Additionally, the impact of domestic support on food security must be examined, and cooperation with multilateral organizations and the private sector is essential. Increasing agricultural productivity and reducing food loss are vital, with international trade playing a key role in ensuring food security and access to innovation. Multilateral cooperation is crucial to strengthen market access, improve transparency, and reduce food insecurity, despite the challenges posed by regional and bilateral trade agreements. The WTO's efforts must expand to address these pressing needs and support the development of holistic food systems.

The discussions presented in these chapters demonstrate the enormous difficulties faced by the WTO in fulfilling its role and objective to organize and simplify the institutional and political process to lead to stronger, more open global trade. These challenges are a direct consequence of the profound shifts taking place in global geopolitics and the difficulties that the WTO faces in adapting to these changes.

The overarching challenge for the WTO and its member countries is to identify the main issues that need to be addressed to respond to the new economic and political circumstances faced by global trade, as well as the institutional transformations needed to adequately address these issues. In this regard, we offer some initial observations:

The first observation, drawn from the chapters dealing with subjects that long have been at the center of the traditional WTO agenda, is that these themes have been on the negotiating table for many years with little or no progress in sight. Furthermore, new geopolitical events, discussed in Chapter I, have aggravated the disagreements and differences in perspectives and needs of countries with varying economic and trade interests and, consequently, different negotiation positions. Examples of these tensions include the new "industrial policies" of the United States and the EU or the position adopted by India in relation to PSH.

Developing countries could obtain real benefits from successful negotiations on these subjects and as such, have an interest in doing so; this, in turn, could lead to a more open and free trade environment. Yet it is highly unlikely that negotiations on these subjects will be able to progress under the present geopolitical conditions, unless changes in the objectives and rules are introduced. Two considerations could be introduced to change how discussions are carried out and facilitate reaching a viable consensus: 1) emphasize the need for innovative ways to integrate these negotiating topics into a more comprehensive discussion, rather than discussing each one separately, and 2) fully incorporate the concept of plurilateral agreements into the overall framework of negotiations.

The second observation is that the interactions between environmental and climate change concerns and trade standards, the subject of Chapters VIII and IX, are relatively new themes that have not been fully incorporated in the WTO agenda. The main problem is that although these are broad global topics, global governance mechanisms are insufficient to define and implement rules and standards or mandate them.

This is particularly true for the new standards and trade regulations that are being proposed by individual countries, which affect trade in a very substantive way. The main example of this is the Farm to Fork scheme, which the EU has developed and is in the process of implementing. The WTO has been slow to incorporate these norms and standards into its working agenda, which has led to them being defined by the unilateral actions of countries or groups of countries, mainly the EU, although they ultimately affect the multilateral trade environment.

A third observation is that in addition to recent geopolitical events, the rapid technological evolution-especially in digital information and artificial intelligence-and the growing attention within the United Nations system to the development of an efficient and safe global food system-including human health concerns-suggest the need to prioritize the incorporation of several other themes into the agricultural trade agenda.

For Latin American countries, the following themes are of special importance:

1. Fully incorporating norms and standards related to human nutrition into the WTO agenda, similar to how sanitary and phytosanitary norms and standards have been incorporated.

2. Incorporating both the plurilateral agreements and the so-called mini-agreements that consider ways to facilitate and enhance trade between two or more participating countries. This would provide flexibility for countries with common interests to make special agreements that facilitate trade between them[3]. Incorporating these types of agreements, which are already widely taking place, into the WTO agenda would improve the WTO's level of involvement, the enforcement of agreed-upon rules, and better sharing of information by member countries.

These two themes are important examples of current areas of work that need to be incorporated into a modernized WTO agenda that responds to the new geopolitical context. These subjects, as well as others identified by member countries, should be central to a new agenda, one that builds on MC 13 and is developed before and during MC 14.

[3] For a discussion of this theme and specific proposals, see Wolff, A., 2024, "Reluctant Interdependence: Multilateralism in a Time of Fragmentation," European Centre for international Political Economy, January; and Okonjo-Iweala 2023.

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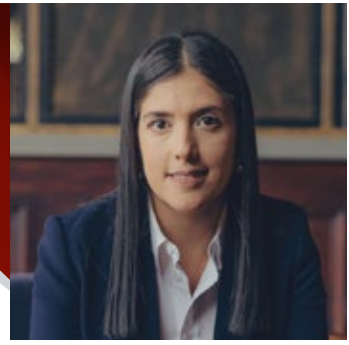

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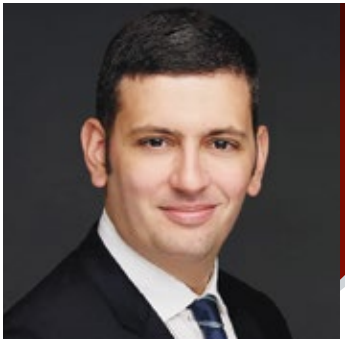

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