

A report for:



The Role of Trade Policy in Achieving Key Sustainability Outcomes in Agriculture

by Patrick Wade

2023 Nuffield Scholar

July 2025

Nuffield International Project No 2309

Supported by:



© 2025 Nuffield International
All rights reserved.

This publication has been prepared in good faith on the basis of information available at the date of publication without any independent verification. Nuffield International does not guarantee or warrant the accuracy, reliability, completeness or currency of the information in this publication nor its usefulness in achieving any purpose.

Readers are responsible for assessing the relevance and accuracy of the content of this publication. Nuffield International will not be liable for any loss, damage, cost or expense incurred or arising by reason of any person using or relying on the information in this publication.

Products may be identified by proprietary or trade names to help readers identify particular types of products, but this is not, and is not intended to be, an endorsement or recommendation of any product or manufacturer referred to. Other products may perform as well or better than those specifically referred to.

This publication is copyright. However, Nuffield International encourages wide dissemination of its research, providing the organisation is clearly acknowledged.

Scholar Contact Details

Patrick Wade
1926 Manton St, Philadelphia, PA 19146
Phone: +1 (512) 788-4599
Email: pmwade11@gmail.com

In submitting this report, the Scholar has agreed to Nuffield International publishing this material in its edited form.

NUFFIELD INTERNATIONAL Contact Details

Nuffield International
Address: PO BOX 495, Kyogle, New South Wales, Australia 2474
Contact: Jodie Redcliffe
Title: Chief Executive Officer
Mobile: (+61) (0) 408 758 602
Email: jodie.redcliffe@nuffield.com.au

Executive Summary

This report seeks to provide greater clarity as to the role of trade policy in achieving key sustainability outcomes in agriculture. First, it provides a brief history of successful efforts to leverage mutual trade goals to effect critical social externalities. The post-war orientation towards supranational organizations and the establishment of rules-based systems of trade is presented as illustrative for the present-day challenge to mobilize an orderly, effective global response to climate change.

Later, there is an examination of the ability of the global rules-based system of trade, administered by the World Trade Organization (WTO), to incorporate sustainable agriculture policies. Specifically, WTO rules related to domestic subsidies and dispute settlements and agreements on Technical Barriers to Trade (TBT) and Sanitary and Phytosanitary Standards (SPS) are studied, with emphasis on the opportunity for collaborative international standard-setting bodies and the importance of strong dispute settlement mechanisms.

The report continues with a focus on the European Union (EU), whose unilateral, top-down approach to the incorporation of sustainable agriculture into trade policies has drawn criticism from affected parties. This report examines the nature of that criticism in the context of the EU Regulation on Deforestation-free Products (EUDR) and other relevant trade policies. It concludes with a summary of a recent stakeholder roundtable in the EU that attempted to respond to those criticisms and reform the EU's approach to future initiatives.

The report concludes with the following recommendations to clarify the role of trade policy in achieving key sustainability outcomes in agriculture:

- Encourage political reengagement with the WTO and advocate for necessary reform to restore it to its status as an enforcer of the global rules-based system of trade. Effective dispute settlement mechanisms will be critical for adjudicating differences in sustainability programs.
- Encourage private industry to learn from the TBT and SPS Agreements and seek to form an independent, international science-based standard-setting body for agricultural sustainability standards. The Codex Alimentarius Commission should be particularly considered as an illustrative example of an equitable and effective approach to this process.
- Urge policy makers to take a global, collaborative approach instead of a unilateral, top-down approach. The rollout thus far of EUDR has only further compounded confusion about the intersection of sustainable agriculture and trade policy. By adopting bottom-up, collaborative approaches, greater clarity, equity and efficacy can be achieved.
- Find compromise on reforms to the WTO's domestic subsidy rules that balances important sustainability considerations and the socioeconomic viability of those employed by agriculture.
- Monitor implementation of the Paris Climate Accords commitments in the EU-NZ FTA and the incorporation of the Strategic Dialogue's sustainability benchmarking system in future FTAs to determine new possibilities for sustainable agriculture in FTAs.

Table of Contents

<i>Executive Summary</i>	3
<i>Foreword</i>	5
<i>Acknowledgments</i>	7
<i>Abbreviations</i>	8
<i>Objectives</i>	9
<i>Introduction</i>	10
<i>The Global Rules-Based System of Trade</i>	12
History of the World Trade Organization	12
Specific WTO Mechanisms and Their Application to Sustainable Agriculture	15
Domestic Subsidies	15
Technical Barriers to Trade	18
SPS and Codex Alimentarius	21
Dispute Settlement Mechanisms	23
<i>The European Union</i>	25
The EU's Significance	25
The EU's Regulation on Deforestation-free Products	25
The EU's Free Trade Agreements	27
Mirror Clauses	28
The Strategic Dialogue on the Future of EU Agriculture	29
<i>Conclusions</i>	31
<i>Recommendations</i>	32
<i>References</i>	33

Foreword

Near the end of the second week of my Global Focus Program (GFP), our group visited Country Choice, a restaurant and shop in Nenagh, Co. Tipperary, Ireland, owned and operated by a gregarious man named Peter Ward. In typical Nuffield fashion, Peter's hospitality was nourishing – both for our stomachs and our souls. He taught us an Irish saying that has been permanently etched on my mind:

Ar scáth a chéile a mhaireann na daoine

People live in each other's shadows

The path that brought me to my Nuffield scholarship is a well-shaded one. I did not grow up on a farm or a rural part of the United States, instead I came into agriculture through a passion for public policy and an ardent love for my home state of Texas. After graduating from the University of Texas, I took an opportunity to lead the public policy and government affairs efforts for a small trade association representing Texas grain sorghum farmers at the Texas state legislature.

As U.S. grain sorghum is a heavily exported crop, this opportunity also exposed me to the interconnected world of agriculture. This taught me two things: The farmers I met around the world typically had the same concerns as the farmers I represented in Texas - stewardship of the land, the weather, input prices, etc. - and that global supply chains and free trade meant we all truly lived in each other's shadows.

Later in my career, I had the privilege of being appointed to the U.S. Department of Agriculture's Agricultural Technical Advisory Committee for Trade Policy in Grains, Feeds, Oil Seeds & Planting Seeds. In this role, I gained firsthand insight to the process of negotiating free trade agreements and the mechanisms that guide the flow of goods and services around the world.

Throughout this time, the stratification between working regularly with farmers at a grassroots level and trade policy makers at an international level began to inspire some questions in my mind. Why were the sustainability initiatives that were dominating so much conversation among farmers not being discussed in trade policy meetings? Why was the World Trade Organization not adjudicating on wildly disparate carbon markets or Voluntary Sustainability Standards? How would anyone actually enforce these ambitious climate commitments occurring at the Paris Climate Accords and other fora?

I asked these questions, but never received satisfactory answers. I kept asking them, though. Eventually, I was turned on to Nuffield International by a colleague of mine in Texas and former Nuffield scholar Jean Lonie. This was, I learned, the perfect forum to ask these urgent questions. More importantly, it was the perfect forum for meeting people from all corners of the planet who had urgent questions of their own.

In addition to an excellent GFP that took me to Argentina, Ireland, France and Poland, I made the following stops for my personal research:

- **Geneva, Switzerland:** WTO Public Forum – attended dozens of panels and had personal conversation with trade policy experts
- **The Hague, Netherlands:** U.S. Foreign Agricultural Service, MVO (Netherlands Oils & Fats Industry), and Het Comité (The Royal Dutch Grain and Feed Trade Association)
- **Brussels, Belgium:** KMC (Danish Potato Cooperative), U.S. Foreign Agriculture Service, Copa & Cogeca, and CELCAA (European agri-food traders association)

I still do not have all the answers to my questions. In a vertiginous sort of way, I sometimes feel I have even more questions than when I started this process. One thing I know for certain, though, is that the answers to all these urgent questions lay somewhere in the cool respite where your shadow meets mine.



Acknowledgments

Pursuing a Nuffield Scholarship has been a regular exercise in gratitude. First and foremost, I am grateful to Nuffield International, Jodie Redcliffe, Ed Kee, and everyone else who invested the trust and resources of this esteemed organization in me.

I am grateful to Bayer and Bev Flatt, whose support made my scholarship possible.

I am grateful to Wayne Cleveland and the Board of Directors of Texas Grain Sorghum Producers who allowed me to take time away from work to travel, study, and write this report. You were the first to show me what was reified on each stop of my Nuffield travels: there is no greater way to know a person than to visit their home, eat their food, and speak of their family.

I am grateful to all my fellow Nuffield scholars, particularly my GFP-Poland cohort. It was the experience of a lifetime to take that journey together. Thank y'all.

I am grateful to my family - my parents Merrill and Crystal Wade and my sister Caroline Wade. It is a privilege to be able to pursue one's passions in life. Caroline and I would not be able to do that without the foundation you two worked hard to build.

Lastly, I am grateful to my fiancée Isabel. Thank you for tolerating my long - often untimely - absences for this travel. Thank you for pushing me to apply for this program in the first place, for the self-belief you have instilled in me. No matter where in the world we may be, I am always home with you.

Abbreviations

AMS	Aggregate Measures of Support
AoA	Agreement on Agriculture
Codex	Codex Alimentarius Commission
CSDDD	Corporate Sustainability Due Diligence Directive
CSDR	Corporate Sustainability Reporting Directive
EBAF	European Board on Agri-Food
EU	European Union
EUDR	European Union Regulation on Deforestation-free
EU-NZ FTA	European Union-New Zealand Free Trade Agreement
FTA	Free Trade Agreement
GATT	General Agreement on Tariffs and Trade
GFP	Global Focus Program
IUU	Illegal, Unreported and Unregulated
MFN	Most Favored Nation
MRL	Maximum Residue Limit
NGO	Non-Governmental Organization
OECD	Organisation for Economic Co-operation and Development
PPM	Non-Product Process and Production Methods
SDG	Sustainable Development Goals
SPS	Sanitary and Phytosanitary
Strategic Dialogue	Strategic Dialogue on the Future of EU Agriculture
TBT	Technical Barriers to Trade
TESS	Forum on Trade, Environment & The SDGs
UN FAO	United Nations Food & Agriculture Organization
VSS	Voluntary Sustainability Standards
WHO	World Health Organization
WTO	World Trade Organization

Objectives

The overarching goal of this report is to provide greater clarity about the intersection of sustainable agriculture and international trade policy. Presently, there is a significant degree of uncertainty among both agricultural producers and trade policy makers about how sustainable agriculture initiatives may be incorporated into the global rules-based system of trade. I intend to mitigate some of that uncertainty, and ultimately guide better development and adoption of these trade policies, through the following objectives:

Objective 1: Establish context and precedent for the incorporation of agricultural sustainability into trade policy.

Objective 2: Identify and evaluate key mechanisms of the global rules-based trading system and their applications to sustainable agriculture.

Objective 3: Examine leading efforts to incorporate agricultural sustainability in other forms of trade policy and assess how these efforts have contributed to the prevailing uncertainty.

Objective 4: Make recommendations for the principles of effectively and equitably incorporating agricultural sustainability into trade policy.

Introduction

In order to understand the present intersection of trade policy and agricultural sustainability, one must first look back to post-war Europe. While trade and political goals have intertwined for centuries – European mercantilism drove colonialization efforts, for instance – the reunification efforts of a fractured and distrusting European continent established the framework for future efforts to leverage trade to achieve social and environmental externalities.

As Europe lay devastated from two world wars across thirty years and centuries of preceding conflicts, many world leaders sought political systems that transcended nationalist interests. One key proponent of this concept of “supranationalism” was French Foreign Minister Robert Schuman. Schuman’s greatest contribution to the reunification effort came in the form of the Schuman Plan, which later evolved into the European Steel & Coal Community (Valls, 2016).

Under this plan, France and Germany, along with four other European neighbors, pooled their coal and steel industries into a common market. France, a major steel producer, was already heavily dependent on Germany’s coal production. By leveraging this codependence, Schuman famously hoped to make conflict between the two neighboring rivals “not merely unthinkable, but materially impossible,” (Schuman Declaration May 1950).

The European Steel & Coal Community formed the basis of what went on to become the European Union. But just as importantly - as evidenced by 70 years of peace on the European continent - it became proof that economic interests could be leveraged vis-à-vis trade policy to generate socially-advantageous outcomes.

Now, a new existential threat looms not over Europe but the entire world. A changing climate threatens to drive shortages in food production, habitat loss, and population displacement. At the same time, the global population is projected to reach nearly 10 billion people by 2050 - requiring over 14 trillion crop calories, a 47% increase over the 2011 baseline (USDA ERS, 2023)

However, unlike in the 1940s, nearly every major global economy is now threaded together in an intricate web of trade agreements and undergirded by a robust rules-based system of trade. There is no greater example of 21st century global interdependence than in the agriculture industry. According to the World Trade Organization (WTO), global exports of agricultural products rose from \$300 billion in 2000 to \$1.48 trillion in 2022.

World trade of agricultural products (Billion US dollars)

Select the flow (imports/exports) and the year on the world map below by using the corresponding scroll-down menu filters or by clicking on the corresponding dot in the summary chart on world trade. Individual economy-level data appear on the map when pointing on the corresponding country/economy.

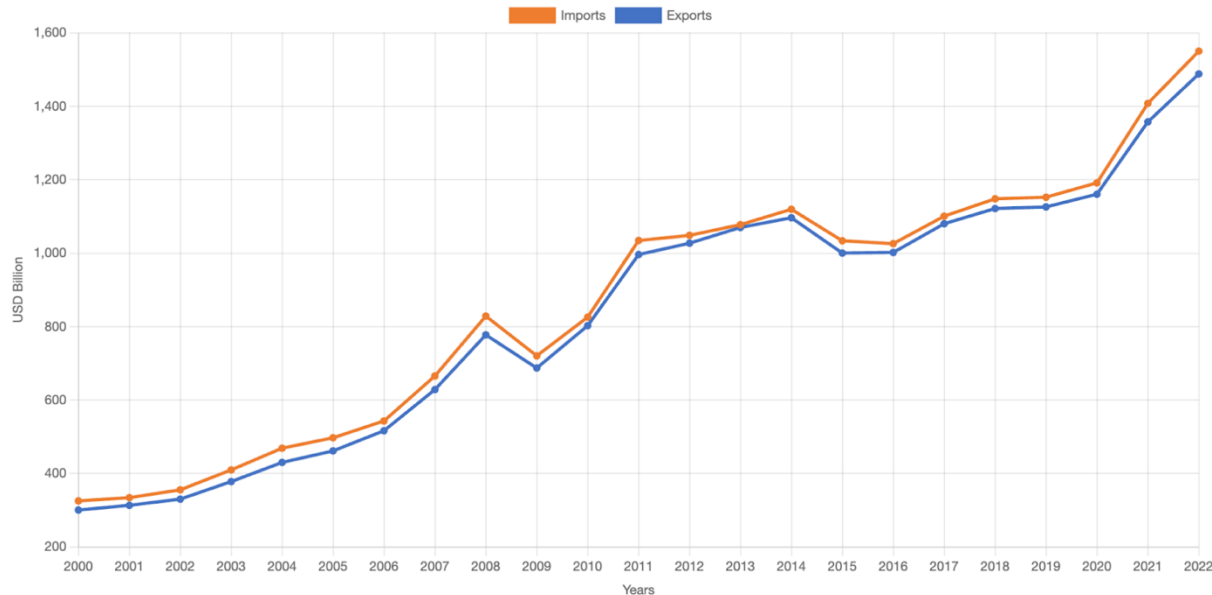


Figure 1. Growth of Agricultural Trade (WTO, World trade in agricultural products)

This acceleration in agricultural trade has been facilitated by reductions in trade-distorting measures such as tariffs, subsidies, and divergent regulatory standards. At the most fundamental level, the rules-based system of trade functions to create a common language for producers, traders, and consumers irrespective of their country of origin.

Despite this framework for coherence and the trans-boundary effects of climate change, there is presently little clarity about how policies that seek to improve agricultural sustainability will be incorporated into this global rules-based system of trade.

This lack of clarity has led to countries pursuing sustainable agriculture initiatives that prioritize disparate objectives with asynchronous methodologies, often favoring their respective domestic strengths. Supranational organizations like the United Nations are convening pacts, such as the Paris Climate Accords, that are bold and ambitious but lack the enforceability of trade policy.

This report seeks to provide that needed clarity by examining some of the most important mechanisms of the global rules-based system of trade and evaluating their ability to incorporate principles of sustainable agriculture. Additionally, it will assess the merits and demerits of certain key sustainable agriculture policies that are currently affecting trade patterns.

The Global Rules-Based System of Trade

History of the World Trade Organization

After the Second World War, the rise of supranational organizations with rules-based systems of trade was not limited to Europe. In 1947, 23 members signed the General Agreement on Tariffs and Trade (GATT), a mutual commitment between countries to reduce tariffs, quotas, and other trade distorting barriers. For forty years, the newly liberalized trading rules were governed by this institution. By the 1980s, there were over 100 members that were party to these commitments and average tariffs erected by GATT members were reduced from over 20% to 5% or less (Unger, 2017).

Quick and Dirty History of GATT Rounds

Name of the Round or Location	Dates	Value of Trade Involved (roughly)	No. of Countries Participating	Notable Outcomes
Geneva	1947	\$10 billion	23	45,000 tariff cuts -- average 35 percent cut
Annecy (France)	1949	n/a	13	tariff reductions
Torquay (England)	1950-51	n/a	38	tariff reductions
Geneva	1956	\$2.5 billion	26	tariff reductions
Dillon Round	1960-61	\$4.9 billion	26	tariff reductions
Kennedy Round	1962-67	\$40 billion	62	35 percent average cut on industrial goods; commitments on use of anti-dumping laws
Tokyo Round	1973-79	\$155 billion	102	34 percent average cut on industrial goods; commitments on non-tariff measures
Uruguay Round	1986-93	\$3.7 trillion	123	services trade and intellectual property included; "built-in agenda" on agriculture, WTO institution created
Doha Round	2001-	n/a	148+	fully incorporates services and agriculture, trade facilitation, development agenda

Figure 2. The History and Achievements of GATT (Unger, 2017)

However, GATT rules were limited in their scope with respect to agriculture, which remained one of the most politically sensitive industries. Members were granted carve outs to continue protectionist policies like export quotas and domestic subsidies with little scrutiny. Concerns about the impact of this agricultural protectionism fueled increased criticism of GATT until, finally, a new system was needed.

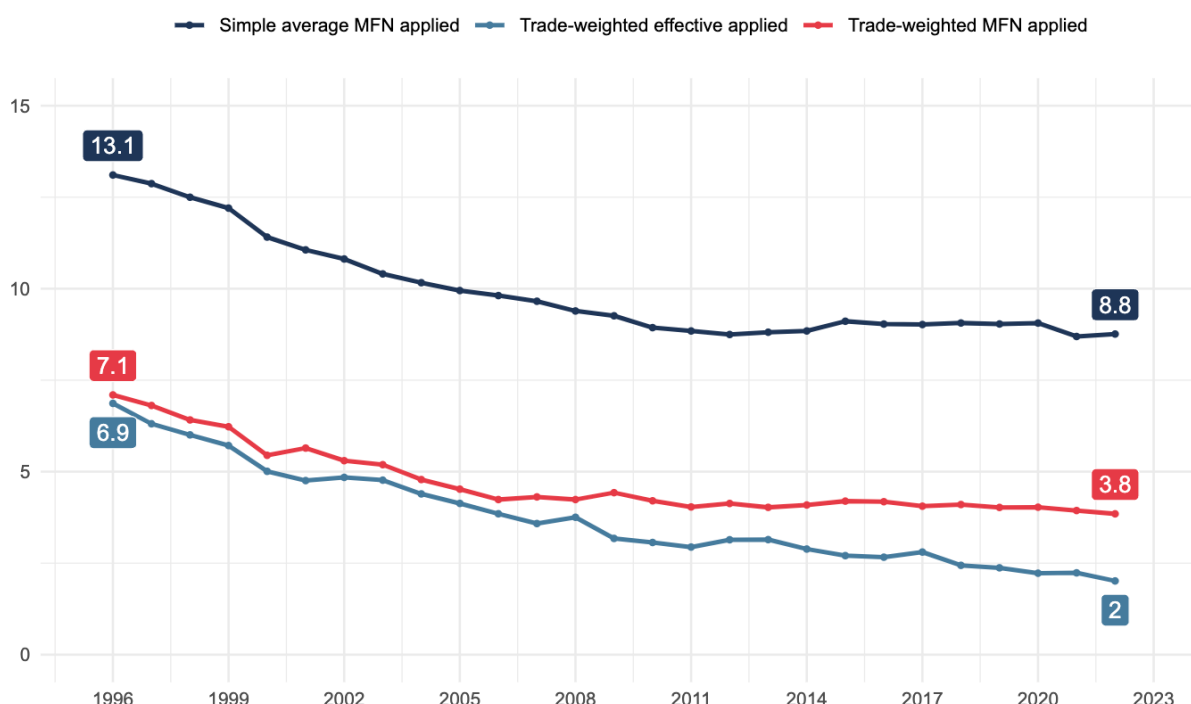
In 1986, at the Uruguay Round of GATT negotiations, discussions began about the formation of the WTO. This round lasted eight years, with the Marrakesh Agreement eventually establishing

the WTO in 1995. With this new body governing the rules-based system of trade came the first Agreement on Agriculture (AoA) - a series of mutual commitments by members to reduce costs associated with agricultural trade - both tariff and non-tariff regulatory barriers - and mechanisms for resolving disputes between members.

Since 1995, WTO members have seen an overall reduction in trade costs by 6-10%, driving a 30-45% increase in trade volume. In the first 12 years of the WTO, agricultural trade costs were reduced by 8.3%, though, notably, they have risen by 1.5% since.

Figure 7: WTO members' average applied tariffs, 1996-2022

Per cent



Source: WTO Secretariat.

Note: The calculations are based on available tariff and import data from 118 WTO members (counting the European Union as one and excluding intra-EU trade). In the cases of WTO members for which annual tariffs or trade or the *ad valorem* equivalent are not available, data were replaced by those of the closest available year.

Figure 3. The Impact of the WTO on Trade Barriers (D'Andrea et al., 2024)

While the primary focus areas of the AoA were market access, domestic support, and export subsidies, the preamble to the Marrakesh Agreement also touched on broader social and environmental objectives:

“Recognizing that their relations in the field of trade and economic endeavour should be conducted with a view to raising standards of living, ensuring full employment and a large and steadily growing volume of real income and effective demand, and expanding the production of and trade in goods and services, while allowing for the optimal use of the world’s resources in accordance with the objective of sustainable development, seeking both to protect and preserve

the environment and to enhance the means for doing so in a manner consistent with their respective needs and concerns at different levels of economic development” (Agreement on Agriculture).

Therefore, from its very inception, the organization responsible for administering the rules-based system of free trade was charged with accounting for the externalities of trade. However, this was easier said than done. In practice, the first major challenge to balance global environmental concerns and domestic sovereignty took decades to reach an agreement.

In 2002, at the WTO Ministerial Conference in Doha, Qatar, the body agreed that overfishing was driving an unsustainable depletion of the world’s fish populations and was enabled by a proliferation of domestic subsidies for commercial fishing operations. For twenty years, WTO members negotiated for an agreement that accounted for nations’ – many of whom still qualified as developing - need to support critical fishing operations while also tying the provision of those subsidies to critical declines in fisheries. In 2022, at last, the WTO Agreement on Fisheries Subsidies was adopted, setting the stage for, among many other reforms, the curtailment of subsidies that enable “illegal, unreported and unregulated” (IUU) fishing. While implementation and other considerations are still being negotiated, this marked the first WTO agreement that attempted to balance the promotion of free trade and environmental sustainability (Irschlinger & Tipping, 2023).

The struggle to reach a compromise on the fisheries agreement is emblematic of the challenges the WTO’s structure currently presents. As a consensus-based organization, it cannot take actions if any of its 166 current members raise an objection. While the founding agreements of GATT and WTO targeted the lower hanging fruit in trade reform, the 21st century has introduced much thornier issues: additional cuts to domestic support, how to govern digital trade, and how to incorporate sustainability concerns into the trade rules.

In response to these and other frustrations, many WTO member nations have sought bilateral and multilateral agreements as a method of advancing trade interests. There are now over 270 regional free trade agreements in the world (Unger, 2017). Further complicating matters, the United States has been blocking the appointment of judges to the WTO’s Appellate Body since 2019, meaning that dispute settlements reached by the body can no longer be appealed, effectively halting their ability to be enforced at all. Many nations have lost faith in the ability in the WTO to effectively adjudicate trade disputes altogether.

It was in this context that I attended the 2024 WTO Public Forum in Geneva, Switzerland for my Nuffield research. I understood the relatively diminished status of the WTO but was committed to exploring the possible intersections of sustainable agriculture with its mission. I was pleasantly thrilled to learn that over 30 of the 138 panels and sessions hosted that week addressed sustainability in some form or fashion, many focused specifically on agricultural sustainability. Sustainability was now the second most-discussed issue in agricultural trade behind food security. Trade policy experts around the world shared my curiosity about the intersection of sustainable agriculture and the rules-based system of trade.

There is an urgent need for a steady, balanced governor of the rules-based system of trade. I believe specific mechanisms of the WTO’s rules provide an excellent roadmap for incorporating sustainable agriculture in that system.

Specific WTO Mechanisms and Their Application to Sustainable Agriculture

Domestic Subsidies

One of the most important - and contentious - functions of the WTO with respect to agricultural trade is its treatment of domestic subsidies. Agriculture is arguably the most politically sensitive industry in any given nation. Food security is directly correlated with national security, a primary directive for any state, regardless of its system of government or economic status. In industrialized, first-world democracies, agriculture is often directly connected to rural prosperity. Maintaining subsidies that bolster said prosperity is often a politically prudent strategy. In democracies whose economies are still developing, agriculture is often the most common form of employment, meaning that subsidy programs flow directly to the majority of voters.

Roughly 900 million people around the world are employed by agriculture, roughly 27% of total jobs as of 2018. While only 5.5% of Europe's labor force is in agriculture, that number rises to 50% in developing countries and up to 70% in the least-developed countries (FAO 2020).

At the founding of the WTO and the AoA in 1995, a system for evaluating the validity of domestic subsidy programs was established. WTO member states knew that some degree of flexibility to administer domestic subsidy programs should be permitted, as agriculture is an industry that depends on many unpredictable, mercurial variables. In general, though, members agreed WTO rules should encourage minimization of domestic agricultural subsidies, particularly those that distort trade the most.

The more trade-distorting agricultural subsidies are considered to be those that establish minimum intervention prices for specific commodities or directly tie their level of assistance to current production levels or prices. Generally speaking, subsidies that are decoupled from current price and production and do not otherwise create price support are considered less trade-distorting (*Domestic Support in Agriculture: The Boxes*).

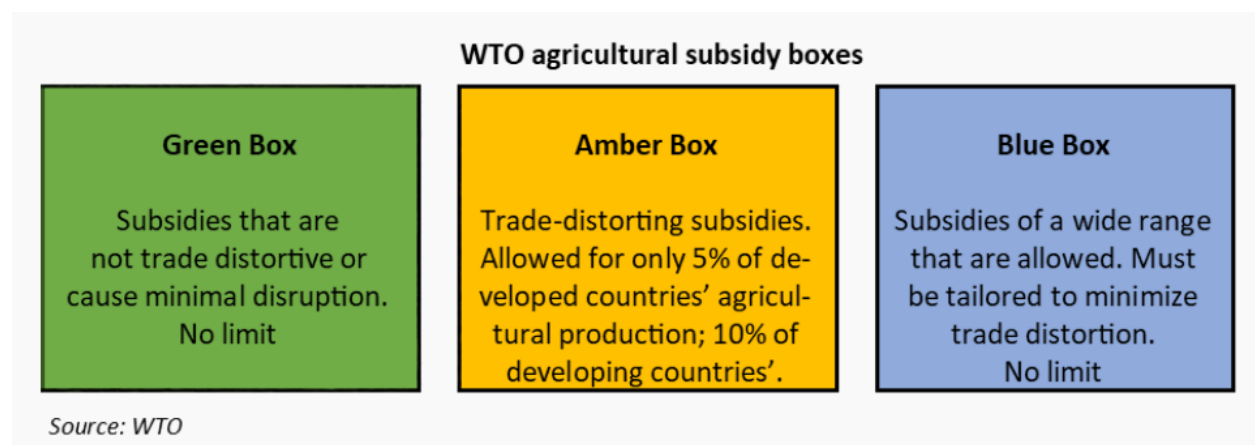


Figure 4. Categories of Domestic Support at the WTO (*Businesses Learn About WTO Rules on Agriculture* 2023)

According to Annex 2 of the AoA, the more trade-distorting agricultural subsidies are placed in what is referred to by the WTO as the Amber Box. Less trade-distorting subsidies are placed in the Green Box. Consider the analogy of a traffic light - amber means slow down, green means continue through. There are Blue Box subsidies, as well, but these only apply to niche scenarios.

Amber Box subsidies are restricted to a certain level; for example, the United States has been restricted to \$19.1 billion of annual Amber Box spending since 2000. Member states are allowed to exempt a certain level of de minimis support (5% of total value of agricultural production for developed countries, 10% for developing countries) from their total domestic subsidy spending, referred to as “Aggregate Measures of Support” (AMS) (Schnepf, 2019).

Lessons for Sustainable Agriculture

While subsidy programs connected to targeted environmental programs are generally seen as acceptable for Green Box designations under Annex 2 of the AoA, some entities advocate for the WTO to more aggressively incorporate sustainability considerations in this process. Some of the most ardent reformists insist that, in order for agricultural subsidies to be considered for the Green Box, they must prove that they do not actively contribute to any agricultural practices that negatively impact biodiversity or further drive climate change.

This philosophy is, in large part, extrapolated from the Fisheries Agreement mentioned in the previous section, which focused first on identifying the fishing practices that were the most harmful to global fishing stocks and then sought to target subsidies that directly enabled those IUU practices. Fisheries and agricultural sustainability are not completely analogous, though. In many situations, fishery stocks are considered to be global commons and belonging to the planet’s collective domain. While the effects of climate change transcend political boundaries, the immediate impacts of biodiversity loss, pollution, and other potential environmental concerns are often more localized to specific countries or regions. In order to bring WTO rulemaking into play, a specific injury to trade must be clearly identified.

Nevertheless, groups such as the Organization for Economic Cooperation & Development (OECD) and the Forum on Trade, Environment & the Sustainable Development Goals (TESS) have been particularly vociferous in calls for agricultural subsidy reforms. For decades, OECD has spoken out on agricultural subsidies that pay out with no constraints on variable input use, arguing that they incentivize producers to become over reliant on pesticides and fertilizers that can generate negative environmental impacts (OECD, 2005).

In a 2022 policy brief, TESS made the case for distinguishing between border measures and economic incentives that encourage sustainable practices and those that encourage unsustainable practices, with an imperative to promote the former and end the latter. TESS argued that, so long as these actions were taken by nations without discrimination, they could be acceptable under WTO rules. However, they would be much more effective if they were done collectively, vis-à-vis rule harmonization and interoperable standards (Bellmann, 2022)

As part of a guest publication for a TESS series titled “*From Vision to Action on Trade and Sustainability at the WTO*,” trade lawyers Dan Esty and Elena Cima proposed a new

“sustainability-based matrix.” The visual aid for this matrix shows how domestic subsidies would be permitted, made available for rebuttal in WTO proceedings, or outlawed and phased out.

	Positive sustainability impacts	Negative sustainability impacts
No trade distortions	<u>GREEN BOX</u> Allowed	<u>RED BOX</u> Rebuttable presumption of inconsistency with WTO law
Trade distortions	<u>YELLOW BOX</u> Rebuttable presumption of consistency with WTO law	<u>DOUBLE RED BOX</u> Prohibited – Obligation to phase out

Sustainability-based matrix

Figure 5. Hypothetical Sustainability-Based Matrix for Domestic Subsidies (Esty & Cima, 2024)

From 2020-2022, annual agricultural subsidies paid directly to producers in 54 countries monitored by the OECD were \$851 billion, the highest on record (OECD, 2023). The United Nations Food & Agriculture Organization (UN FAO) projects that this figure could reach \$1.8 trillion by 2030. Should this bear out, agricultural producers and their representatives should be prepared to:

1. Defend the validity of these subsidy programs
2. Find compromise for incorporation of sustainable principles where possible

Any repurposing of agricultural subsidies towards sustainability outcomes would likely result in significant shedding of income for producers in the short- and medium-term. That same UN FAO report even acknowledges that *“there will inevitably be winners and losers from formulating a repurposing strategy. In reforming policies, policymakers will need to best judge how negative short-term impacts and trade-offs can be mitigated,”* (FAO et al., 2021).

One opportunity for compromise is to prioritize the proverbial carrot over the stick. Instead of tying subsidy eligibility to sustainable outcomes, promote subsidies that pay producers for implementing ecosystem services - practices that actively improve biodiversity, improve water quality, mitigate water or soil runoff challenges, or otherwise achieve positive environmental outcomes on agricultural lands. Furthermore, endorse methodologies that account for historical improvements already taken on farm lands.

Agricultural subsidies were among the most important trade policy issues that gave rise to the creation of the WTO. For three decades, criteria for meeting Green Box and Amber Box eligibility have been hotly debated for their distortive impact on free trade, food security and the environment. If producers want to maintain access to these programs, they should be prepared to compromise on building out ecosystem service programs that promote equity and enforceability.

At the same time, proponents of aggressive subsidy reform in the name of sustainable agriculture should be mindful of the interconnectedness of agricultural systems with rural economies and social well-being. Before the Sustainable Development Goals (SDGs), there were simply the three

pillars of sustainable development: economic, environmental, and social sustainability (Emerick, 2024). In pursuit of one pillar (environmental) reformists should not unduly threaten the social sustainability of producers around the world by eliminating access to safety nets.

Technical Barriers to Trade

Another key function of the WTO with respect to the intersection of agricultural sustainability and trade policy is its administration of the Technical Barriers to Trade (TBT) Agreement. Negotiated as part of the founding of the WTO in 1995, this chapter details WTO member states' responsibilities for addressing divergent technical regulations and standards that may impede the flow of trade.

After tariffs, technical barriers are the measures with the largest impact on trade. These include measures aimed at protecting human, animal and plant health, protecting the environment, preventing deceptive practices, and establishing minimums for certain desirable qualities in a product, among many others. When standards on those measures diverge widely between member states, large inefficiencies in trade are generated; producers and manufacturers must adjust production methods, sellers and consumers must interpret foreign standards, and - perhaps most relevant to this research topic - compliance with these divergent standards must somehow be evaluated and certified.

The function of the WTO and its TBT Agreement is not to harmonize each and every technical regulation and standard each of its member states enacts, thereby flattening 166 sovereign nations into one regulatory apparatus. There are many causes for legitimate divergence between member states. An example often cited by the WTO relates to countries that are prone to earthquakes instituting stricter requirements for construction materials (*Technical Information on Technical Barriers to Trade*).

Often, though, these technical barriers to trade emerge from less universally agreeable provenances. For this reason, the TBT Agreement calls upon members to not enact measures that “*are prepared, adopted or applied with a view to, or with the effect of, creating unnecessary obstacles to trade.*” Additionally, Most Favored Nation (MFN) clauses apply to the TBT Agreement, meaning that, broadly speaking, products imported from a member state must be afforded the same treatment as like products in the importing country or other member countries.

As one can imagine, these principles are easier articulated than adjudicated. For this reason, the WTO encourages its members to rely on existing international standards for their own national regulations unless they are unworkable “*because of fundamental climatic and geographical factors or fundamental technological problems.*” Furthermore, the WTO encourages its members to participate as much as possible on those international standard-setting bodies (*Agreement on Technical Barriers to Trade*).

Lessons for Sustainable Agriculture

One of the most important challenges facing the efficacy of agricultural sustainability initiatives is the lack of consistent, harmonized standards. In many ways, these challenges are directly emblematic of the issues that gave rise to the WTO's TBT Agreement in the first place. While this

text and its case law can provide some guidance, there are some areas where the same issues that have plagued TBT Agreement enforcement may reemerge.

Primarily, questions of how to delineate between product and process may hinder the ability of the TBT Agreement to sort out divergent agricultural sustainability policies. Per Article 2.8 of the TBT Agreement, WTO members are expected to “*specify technical regulations based on product requirements in terms of performance rather than design or descriptive,*” whenever appropriate (*Agreement on Technical Barriers to Trade*).

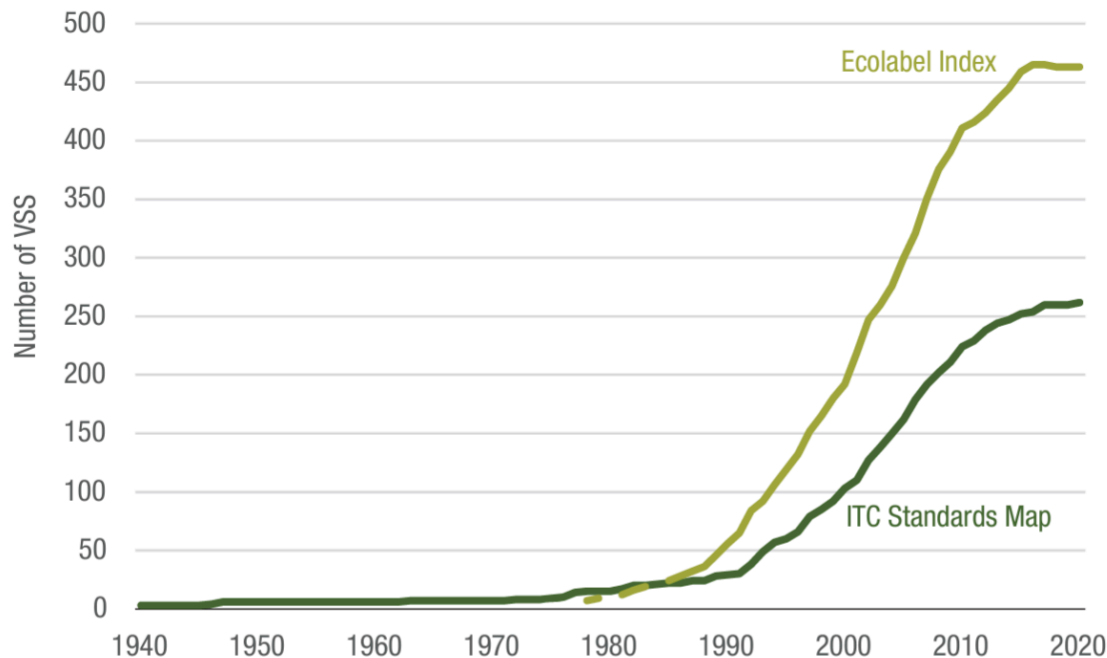
This is challenging enough when dealing with clearly defined products. When evaluating non-product-related process and production methods (PPMs), there is even greater opacity. The International Institute for Sustainable Development defines PPMs as “*the methods and techniques used to produce goods and services that may have an impact on the environment, human health, or animal welfare, but are not directly related to the physical characteristics or quality of the product itself,*” (Oeschger & Bonanomi, 2023).

PPMs are closely associated with Mirror Clauses (to be discussed in greater detail in the European Union chapter), but for the purpose of this section it’s worth noting that PPMs have a relatively unproven track record of validity under the TBT Agreement. Nevertheless, they are returning to prominence as countries - primarily the European Union - pursue broad sustainability goals. PPMs are now targeting sustainable priorities such as a product’s carbon intensity, association with deforestation, comportment with animal welfare standards, and so on. While many of these PPMs have yet to be tested by the WTO, trade law experts believe the ones that implement context-sensitive sustainability requirements with respect to diverse production conditions will be best equipped to stand up to legal scrutiny. In other words, countries designing PPMs should adhere to the spirit of free trade and not attempt to implement one-size-fits-all policies.

An aspect of the WTO’s TBT Agreement that is undeniably instructive on this subject is the role of international standard-setting bodies. Nearly every conversation I had with government officials and industry representatives echoed the need for a predictable, uniform voice for standards in the agricultural sustainability space.

A prime example of the need for greater uniformity in agricultural sustainability standards is the proliferation of Voluntary Sustainability Standards (VSSs) around the world. VSSs include various certification schemes, labeling programs and other forms of standards aimed at verifying the implementation of a certain sustainable practice, often for export purposes. A 2020 report from the UN Conference on Trade and Development (UNCTAD) visualized the rise of new VSSs over the last three decades:

Figure 6. Evolution in the number of VSS active worldwide, 1940–2020



Source: UNFSS (2020).³

Figure 6. The Growth of VSSs in the Last 30 Years (*Better Trade for Sustainable Development: The Role of Voluntary Sustainability Standards* 2021)

According to the International Trade Centre, that number has risen to 353 different VSSs as of 2024 (*Standards Map* 2024). As the number of VSSs rises without a uniform standard-setting body, they run the risk of increasing fragmentation of methodologies and objectives. This fragmentation both makes compliance for producers more challenging and ultimately threatens the effectiveness of the programs themselves.

The direct application of the TBT Agreement to VSSs is nebulous, as they are voluntary, at times span across countries, and often have indeterminate effects on their respective industries. Some experts believe that the inherently political nature of these diverging methodologies portends intractable gridlock, unless the private sector can lead in elevating an international standard-setting body.

On a panel I attended at the 2024 WTO Public Forum titled “*Agricultural Trade and Innovation: How the WTO Agreements Intersect with Sustainable Farming*,” trade lawyer Stéphanie Noël said the following on the subject of divergent standards in sustainable agriculture:

“We need more alignment and it cannot really come from government. We need to look at the TBT Agreement... you had preexisting standards before that agreement. The private sector is apolitical... Because of the complexities of agricultural sustainability, I don’t know who but industry can drive harmonization,” (Noël, 2024).

There are more VSSs in global agriculture than I could list here. Parsing their respective merits and shortcomings would be a Nuffield Scholarship project in and of itself. However, in order to overcome the political challenges of divergent standards in sustainable agriculture, producers who participate in VSS's should be prepared to educate their respective trade policy makers on the importance of predictability and transparency in these systems. In turn, the International Institute for Sustainable Development identified some actions governments can take to better kickstart the harmonization process for VSSs, including promoting the creation of new farmers' associations to better advocate for collective needs, building out better infrastructure for new technology rollout, and subsidizing VSS compliance costs (Voora et al., 2022).

If industry and governments can collaborate in this regard, the WTO's TBT Agreement provides a meaningful framework for harmonizing the many diverging standards in sustainable agriculture, a key priority in ensuring these standards are both equitable and effective. There is another WTO Agreement that provides even more explicit instruction on how to best approach harmonization of sustainable agriculture standards, though.

SPS and Codex Alimentarius

Closely related to the WTO's TBT agreement is the Sanitary and Phytosanitary (SPS) Agreement. Also enacted at the beginning of the WTO in 1995, this chapter specifically addresses agricultural protocols related to the protection of human, plant and animal health. While the SPS Agreement has many provisions and applications that intersect with agricultural sustainability - once again I will leave the exploration of the important role of biotechnology and crop protection technology in achieving sustainable intensification of production agriculture to a different Nuffield Scholar - it has one aspect that is particularly instructive.

Similarly to the TBT Agreement, the SPS Agreement dictates that *"Members shall ensure that any sanitary or phytosanitary measure is applied only to the extent necessary to protect human, animal or plant life or health, is based on scientific principles and is not maintained without sufficient scientific evidence..."* (The WTO Agreement on the Application of Sanitary and Phytosanitary Measures).

It expounds upon this principle in the same fashion as the TBT Agreement, instructing members not to arbitrarily or unjustifiably discriminate against other members while still being afforded a certain degree of flexibility to administer SPS protocols reflective of regional pest and disease conditions. Critically, this chapter protects against top-down, one-size-fits-all approaches to regulatory policies. Trade policy relating to sustainable agriculture can learn from these exceptions, particularly in their requirements for scientific and technical justifications.

However, the provision of the SPS Agreement that is perhaps most applicable to trade policy in sustainable agriculture can be found in its preamble:

"Desiring to further the use of harmonized sanitary and phytosanitary measures between Members, on the basis of international standards, guidelines and recommendations developed by the relevant international organizations, including the Codex Alimentarius Commission, the

International Office of Epizootics, and the relevant international and regional organizations operating within the framework of the International Plant Protection Convention, without requiring Members to change their appropriate level of protection of human, animal or plant life or health,” (The WTO Agreement on the Application of Sanitary and Phytosanitary Measures).

The Codex Alimentarius Commission (Codex) is a collection of food safety, production and labeling standards, guidelines and codes. A joint effort by the United Nations FAO and World Health Organization (WHO), Codex standards are developed based on the best available scientific and technical evidence and are typically ratified on a consensus basis by members.

Maintaining a centralized hub for uniform standards adds a crucial layer of validity, trust and interoperability in the politically fraught space of sanitary and phytosanitary standards. Codex establishes a collection of Maximum Residue Limits (MRLs) for pesticide residue on food, risk assessment protocols for biotechnology, and other topics that often foment discord between trading partners.

While Codex itself does not wield any enforcement power, because it is directly enshrined in the WTO SPS Agreement, WTO members who adhere to Codex standards for their own SPS protocols are not typically required to provide additional justification for these actions. WTO members who adopt more stringent SPS standards risk dispute settlement actions lest they provide sufficient scientific and/or technical justifications (*Ensuring codex remains the foundation of the Global Food System*).

Beyond just adhering to Codex standards, many WTO members - particularly developing nations - often choose to adopt Codex standards as their own domestic standards in wholesale. This allows these nations to invest otherwise scarce resources in fully participating in the international bodies that develop these standards instead of pursuing duplicative work in their own countries.

Lessons for Sustainable Agriculture

The SPS Agreement identifies three standard-setting bodies to whom WTO members should aim to adhere. These bodies - Codex, the World Organization for Animal Health (formerly International Office for Epizootics, for animal health), and the International Plant Protection Convention (for plant health) - are commonly referred to as the “Three Sisters.”

Any effort to harmonize discordant agricultural sustainability standards vis-à-vis trade policy should weigh the merits of designating a “Fourth Sister” organization for sustainability. If such a body were established with a commitment to sound scientific principles, it could help mitigate many of the challenges of divergent agricultural sustainability policies just as Codex has done for SPS standards.

As was discussed in the TBT Agreement section, though, it is paramount for producers and their associations to step up and proactively participate in the development of any Fourth Sister to ensure its standards are equitable, realistic and achievable. In 2016, the World Wildlife Fund proposed “Codex Planetarius,” a non-governmental organization (NGO) driven effort to quantify the harms of various agricultural practices and “integrate environmental externalities into pricing” by pursuing enforcement through the WTO and bilateral trade agreements (Clay, 2016). While the

effort has not yet gained much traction in the trade policy space, it is an example of the potential alternative frameworks that may emerge and impact global agricultural trade if producers and their trade associations do not advocate for equitable, science-based international standard-setting bodies for sustainable agriculture.

Dispute Settlement Mechanisms

Each of the aforementioned technical functions of the WTO - subsidies, technical barriers to trade, and sanitary and phytosanitary protocols - hinge on the WTO's dispute settlement mechanism. Considered the crown jewel of the rules-based global trading system, the WTO's dispute settlement mechanism provides for the actual enforceability of its agreements between members. If one member believes another is maintaining a policy that is in violation of a WTO agreement, they can file a complaint against that member that initiates the following process:

6.1 Flow chart of the Dispute Settlement Process

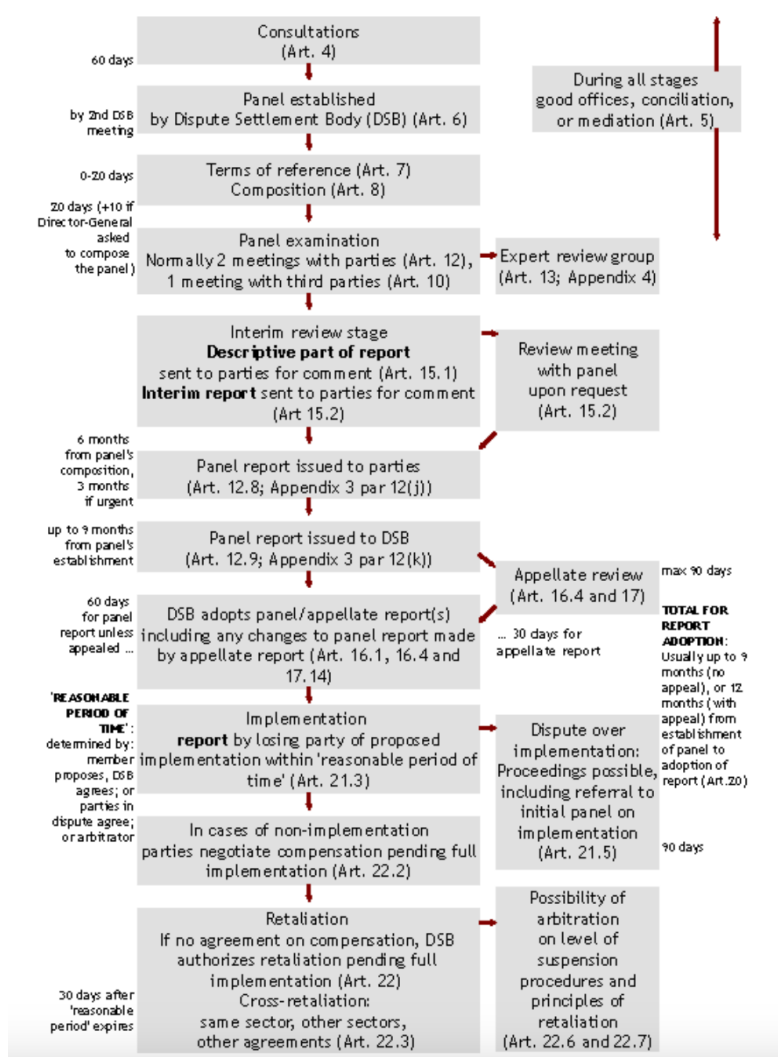


Figure 7. The Dispute Settlement Process (*The process — Stages in a typical WTO dispute settlement case*)

For over half a century – as GATT also had a dispute settlement mechanism - the rules-based system of trade was able to adjudicate differences between its members and actively compel greater international harmonization. At the end of the dispute settlement process, if a country is found to be in violation of a WTO agreement it is obligated to bring that policy into compliance, sometimes with an additional remedy provided to the injured plaintiff country as well.

On a panel at the 2024 WTO Public Forum titled “*The WTO at 30: Evolution or Revolution?*” trade lawyer and professor Robert Howse emphasized that the WTO’s dispute settlement mechanism allowed for otherwise unequal nations to hold one another to account on a level playing field. He cited how Indonesia pursued a dispute settlement case against the United States in 2010 regarding the latter’s ban on importing clove cigarettes. The case was ultimately settled out of WTO bounds, with a Memorandum of Understanding reached between the two countries to further their mutual trade interests with one another (Howse, 2024).

In order for the WTO and the global rules-based trading system to properly function, it must have an intact and operable enforcement mechanism. However, since 2019, the United States has blocked the appointment of judges to the WTO’s appellate body, effectively rendering the dispute settlement process null, as there is no longer any forum to hear the legally required appeals process.

This decision was undertaken by the Trump Administration and upheld by the Biden Administration for legal - concerns of judicial overreach - and political - consternation with supranational bodies as a whole - reasons far beyond the scope of this report. However, the matter is relevant to trade policy and sustainable agriculture for two key reasons.

Lessons for Sustainable Agriculture

First, any efforts to incorporate sustainable agriculture to the global rules-based trading system must come with a robust mechanism for resolving disputes between trading partners. Exact definitions of sustainable practices and precise alignment of methodologies are not necessarily required to achieve greater harmonization between agricultural sustainability policies. Nor should that endeavor even be considered possible. However, an enforcement mechanism to properly adjudicate between those differences is essential and allows for one-size-fits-all approaches to be minimized.

Second, the absence of this global rules-based trading system creates a void in which other power structures emerge. In this case, many nations are pursuing bilateral and multilateral agreements that contain their own dispute settlement mechanisms. In terms of incorporating sustainable agriculture into trade policy, one party continues to drive the agenda forward.

The European Union (EU) has emphasized environmental considerations and sustainability for decades. In the last five years, however, it has accelerated those efforts, shaping the way trade policy accounts for sustainable agriculture. In this next chapter, I will examine some of the most prominent EU efforts to date and what they portend for the future of sustainable agriculture in trade policy.

The European Union

The EU's Significance

The European Union is arguably the most influential actor in both sustainable agriculture and trade policy as discrete policy spheres. They are, however, inarguably the most influential actor at the nexus of the two. When I first proposed this research topic, I knew in order to best represent the landscape of this topic I must visit with trade ministers, industry leaders and producer trade associations in the EU. I had read policy decrees and heard substantial input from the perspective of the U.S. agricultural industry, but I anticipated that was only one side of the coin.

What I learned - traveling and meeting with those types of experts and more across Switzerland, Netherlands and Belgium - was that reality was more occluded than I had hoped for and, simultaneously, more straightforward than I hypothesized.

In each meeting I attended, the acuity and timeliness of my research topic was politely affirmed. Many individuals agreed that, while the EU was inserting sustainable agriculture provisions into trade agreements and policies that would affect global supply chains, there was little clarity regarding how these policies would interact with other countries' initiatives vis-à-vis trade policy. I did not discover any silver bullets - there is no perfect manual for assembling an equitable, science-based trade policy framework for sustainable agriculture. There is instead an unruly patchwork of initiatives with varying - but all significant - degrees of global impacts.

Yet, there is also a sizeable dissatisfaction within some elements of the EU agricultural policy space regarding the bloc's philosophy and approach to this issue thus far. The world watched as farmers in Europe protested various climate and sustainability schemes in recent years. The EU's Farm to Fork strategy - the agricultural arm of its Green Deal, aimed at transforming EU food systems by drastically reducing pesticide and fertilizer use, among other goals - collapsed in 2023 and was supplanted by an arduous but necessary stakeholder roundtable called the Strategic Dialogue on the Future of EU Agriculture (Wirtz, 2024).

The nature of this dissatisfaction is myriad and I will touch on some highlights later in this chapter. At the center, though, is a frustration with the European Commission's top-down approach to agriculture policymaking. In order to actually accomplish its desired climactic and environmental goals, sustainable agriculture policy need to be achievable and equitable.

The EU's Regulation on Deforestation-free Products

There is no more timely or emblematic intersection of trade policy and agricultural sustainability than the European Union's Regulation on Deforestation-free Products (EUDR). Originally set to take effect on December 30, 2024 for most companies and on June 30, 2025 for small- and medium-sized enterprises, the EU recently deferred enforcement by 12 months to allow affected companies more time to prepare for its significant compliance burden. While this postponement

provides a momentary reprieve, farmers, ranchers, processors and nearly every other link in the global agricultural supply chain are still bracing for its looming impact.

Proposed as a piece of the EU's original Green Deal, EUDR is a sweeping, systematic approach to traceability and sustainable certification in agricultural trade. In aspiration, EUDR is designed to create a nexus between deforestation – considered a fundamental piece of climate change due to the effect of a felled tree emitting carbon dioxide compounded by the future loss of its sequestration potential – and agricultural production's impact on deforestation and the EU's consumption of agricultural products.

Although most experts suggest the EU is primarily concerned with palm oil from Southeast Asia and soybeans from Brazil, EUDR will require companies who bring agricultural products from all global trading partners into the EU to prove that those products did not originate from recently deforested land or in other ways contribute to forest degradation. Countries are triaged across three tiers (low, standard, and high) of risk for producing products that are not deforestation-free.

Exporters must submit due diligence statements verifying the products are deforestation-free, including geolocation of all plots of land where the relevant commodity was produced. Countries with low risk profiles have been told they can submit simplified due diligence statements, but the mass-balance approach to verification employed by the U.S.'s Corn Sustainability Assurance Protocol (U.S. Grains Council, 2023) and its Soy Sustainability Assurance Protocol (U.S. Soy Export Council et al., 2022) is not permitted across the board, as EUDR wants to verify compliance at the individual farm level. Third party certification schemes like the two aforementioned U.S. commodity protocols are accepted, but full details of that compliance have not yet been established. Additionally, at this time, neither the Country Benchmarking nor the online portal for due diligence statements has been completed. Fines for non-compliance of EUDR can reach up to 4% of the company's annual EU profits (*Regulation on Deforestation-Free Products*).

In a certain light, this effort represents the most ambitious effort on record to leverage global agricultural trade volume to achieve a socially-advantageous externality. It drives harmonization of a uniform methodology and provides an opportunity for the global agricultural supply chain to align on a key element of agricultural sustainability.

And yet, as confirmed by the recent deferral, the prevailing narrative around EUDR - both among the U.S. industry affiliates I have worked with and European experts I met with during my travels - is a pessimistic one.

When I met with U.S. Foreign Agriculture Service (FAS) Agricultural Specialists Laura Geller and Bob Flach at The Hague, Netherlands, I gleaned five key perspectives on some of the challenges that may be driving that pessimism with EUDR (Geller & Flach, 2024):

1. The EU Directorate-General for Environment developed EUDR from the top-down. Industry is required to comply, but the EU left them on their own to figure out the rules for how to actually implement the program.
2. There is a significant lack of clarity on due diligence statement requirements, both in terms what will be needed from each risk tier and also how the information technology systems that will process the statements will work.

3. The burden for overseeing EUDR implementation is not equal across EU member states. Nations such as Netherlands bear significantly greater responsibility due to the volume of trade at the Port of Rotterdam, which is the largest in the EU.
4. Point 3 is compounded by the fact that the regulatory entities designated as competent authorities for EUDR implementation vary across each member state. For instance, in the Netherlands the competent authority is The Netherlands Food and Consumer Product Safety Authority, whereas in Sweden it's the Swedish Forestry Agency. There is a lack of familiarity and regular consultation between these entities, fragmenting expectations for implementation.
5. Compliance may be achievable for the ABCDs (Archer Daniels Midland, Bunge, Cargill, and Louis Dreyfus) who can dedicate teams of hundreds to processing the necessary paperwork. Small- and medium-sized exporters are unlikely to have these resources while also facing greater harm from the 4% fine on total EU profits.

Additionally, at the 2024 WTO Public Forum titled “*Cultivating the future: Sustainable practices and digital technologies in Latin American agriculture*,” Andrea Villarruel Cavero, Head of Certifications at a Peruvian coffee cooperative demonstrated how geolocation mapping requirements are burdensome for all parties, but particularly so for developing nations. Cavero said that just collecting 90% of the required geolocation data has taken four years and they haven't even begun cataloguing and analyzing it yet. This represents the significant equitability challenges EUDR places on developing and least-developed countries (Cavero, A., 2024).

It seems that the European Commission has been made well-aware of many the above points, both from their own constituents and through constructive avenues with allies such as the EU-US Collaboration Platform on Agriculture. In addition to the deferral and the reworking of stakeholder input (to be discussed in the Strategic Dialogue on the Future of EU Agriculture section), the EU has shifted to emphasize the concept of “interoperability” in pending sustainability initiatives such as the EU Corporate Sustainability Reporting Directive (CSRD) or the EU Corporate Sustainability Due Diligence Directive (CSDDD). This shift may represent a latent acknowledgement of the significant compliance challenges stemming from EUDR and the importance of greater collaboration in the policy making process (*IFRS foundation and EFRAG Publish Interoperability Guidance* 2024).

Beyond the global supply-chain-spanning effort of EUDR, there are other EU initiatives that are instructive for understanding the current intersection of sustainable agriculture and trade policy.

The EU's Free Trade Agreements

The fact that bilateral and multilateral free trade agreements (FTAs) are not the focal point of this report is, in and of itself, further evidence of trade policy's complicated status quo. For much of the last 30 years, FTAs were the prevailing force for both expanded market access and trade-leveraged externalities. It has only been in recent years, for reasons documented above, that initiatives like EUDR have overtaken FTAs in effecting trade policy.

Nevertheless, the EU has committed itself to inserting binding language related to sustainable agriculture in newly-negotiated FTAs with like-minded trading partners. Most notably, the EU-New Zealand FTA (EU-NZ FTA), which entered into force on May 1, 2024, gives teeth to the

Paris Climate Accords by allowing for a failure to “refrain from any action or omission that materially defeats the object and purpose of the Paris Agreement,” to be subject to dispute settlement proceedings. As the Paris Climate Accords and its Nationally Determined Contributions are not otherwise binding, this constitutes a noticeable step towards enforceability of sustainable agriculture standards.

In addition, the EU-NZ FTA includes general acknowledgements that the two parties should mutually acknowledge the importance of deforestation and collaborate on efforts to minimize its impact - albeit with no direct reference to EUDR - and promote emissions trading schemes as a solution to climate change. These provisions are similar to general commitments to collaborate on socially-advantageous externalities that have been found in FTAs for decades (*Free Trade Agreement between the European Union and New Zealand* 2024).

The EU and four Mercosur countries (Argentina, Brazil, Paraguay and Uruguay) also reached an agreement on a long-disputed FTA in December 2024. This agreement has been reported to include binding commitments on Paris Climate Accords commitments, as well. However, at the time of publication of this report, the full text of the agreement has not yet been released.

Mirror Clauses

As discussed in the TBT Agreement Chapter, there remain significant questions regarding the legality of non-product process and production methods (PPMs). Nevertheless, the EU has attempted to institute, vis-à-vis FTAs and domestic European legislation, reciprocity of their own PPMs with their trading partners. In the context of sustainable agriculture, these policies, known as mirror clauses, seek to require countries who export food and agricultural goods to the EU to adhere to the same restrictive production practices with respect to pesticides, fertilizers, and other welfare standards as EU producers.

Mirror clauses have a history of adjudication at a WTO level. One prominent example came in 1997, when the U.S. required imported shrimp to prove that it was harvested by a trawler that used a specific turtle-excluding device. The WTO eventually ruled that the U.S. was justified in pursuing the environmental concern of protecting turtles but that ultimately its requirement to use a U.S.-specific device to achieve that was a discriminatory technical barrier to trade (Rees, 2022).

In recent years, the EU has attempted to establish reciprocity for many Farm to Fork strategies vis-à-vis mirror clauses. One particularly thorny application of this mechanism has come with respect to pesticide applications. Here, the EU has controversially applied an environmental risk assessment framework to products subject to human, plant and animal health regulations under the SPS Agreement (CropLife America, 2022).

This approach blurs the respective authorities of WTO agreements and creates a legally tenuous foundation for enforcement. Furthermore, it fails to incorporate the context-sensitive recommendation from the TBT Agreement Chapter of this report. Lastly, it risks violation of the WTO’s Chapeau Test, in which a regulation must prove its requirements are necessary to achieve its intended objective in a manner that is not unduly trade restrictive and does not discriminate (Oeschger & Bonanomi, 2023).

It is understandable that EU farmers who are subject to these PPMs may want to restore competitiveness by enforcing them on trading partners as well, but mirror clauses, as currently pursued by the EU, form a specious trade policy foundation for the equitable and effective incorporation of sustainable agriculture.

The Strategic Dialogue on the Future of EU Agriculture

As critical as the United States and other international trading partners are of the EU's unilateral efforts to institute its sustainable agriculture practices in trade policy, many EU farmer organizations are even more frustrated with its domestic programs. Following the collapse of the EU's Farm to Fork Strategy, the European Commission sought to rethink its top-down philosophy and instead incorporate a more grassroots perspective for its future agricultural policymaking. In early 2024, it convened 29 stakeholders across the European agricultural community in The Strategic Dialogue on the Future of EU Agriculture (Strategic Dialogue) to ensure mistakes of the past are not repeated in the future.

This dialogue was concluded in the fall of 2024 and a detailed report was published soon after. This report presents a unique insight into the competing and aligned priorities of some of Europe's key agricultural stakeholders and offers a roadmap into the future of the most influential actor at the intersection of sustainable agriculture and trade policy.

In its introduction, the report lays bare the difficult balance the EU is attempting to strike. All following quotations and analysis comes directly from the Strategic Dialogue (*Strategic dialogue on the future of EU Agriculture*, 2024):

“To put it bluntly, things have developed in such a way that all too often agricultural production and its natural preconditions have become entangled in a lose-lose constellation... With a view to the equal necessity of food and natural resources, it is clear, however, that this lose-lose situation cannot be resolved in either direction alone – neither through the promotion of environmentally incompatible food production, nor through environmental protection that ignores the socio-economic conditions of farming, nor through a mere postponement of one or the other. Rather, it is about enabling win-win situations so that, as the mandate of the Strategic Dialogue states, “agriculture and the protection of the natural world can go hand in hand”. At the same time, of course, this facilitation must be developed under the conditions of broader trends that profoundly change societal expectations of the agricultural and food systems through, e.g., social differentiation, technologization, urbanisation, changes in dietary and culinary styles, or animal ethical standards. It is therefore not surprising that agriculture is one of the central fields on which contemporary societies have always and will continue to negotiate essential aspects of their self-understanding. This includes fundamental questions such as the relationship between humans and animals or nature and culture as well as social structures such as town and village or temporal orders such as those of tradition and progress.”

Later provisions of the agreement prioritize greater coherence between the EU's trade policies and sustainability policies, noting *“The overall ambition should be to create a stronger alignment of imports with EU food and farming standards.”*

One manner of achieving this objective will come by establishing a *“benchmarking system that will harmonize methodologies of on-farm sustainability assessments. The system should focus first on benchmarking of agriculture and could in further steps be extended to the whole agri-food system. This benchmarking system should be based on common objectives, principles, and criteria, and include monitoring and verification tools with common metrics and indicators.”*

The EU intends for this benchmark to establish a more level playing field that avoids some of the uncertainties and inefficiencies that have emerged from the currently fragmented landscape of VSSs and other sustainability protocols. As the EU pursues implementation of this measure, it will be critical to monitor its application to FTAs and other trade policies.

Broadly speaking, the Strategic Dialogue calls for the EU to take greater leadership in reforming and returning the WTO to relevance. While it also calls for the European Commission to revisit its priorities with respect to trade agreements, it does not seem to back down from asserting the EU should maintain and promote strict agricultural sustainability standards.

Lastly, the Strategic Dialogue seeks to establish a European Board on Agri-Food (EBAF), a *“new multistakeholder body... to play an important role in developing, implementing, overseeing, and refining the benchmarking framework, addressing and resolving inconsistencies and monitoring progress.”*

Time will tell if EBAF and the other edicts from the Strategic Dialogue will reform the EU’s approach to the nexus of sustainable agriculture and trade policy. There is little doubt that the region will continue to be among the most influential in the space, though.

Conclusions

In order to effectively incorporate sustainable agriculture to the rules-based system of trade, it is important for producers and policy makers alike to look first to the past. Post-war efforts proved it was possible to wield economic interests in the name of social externalities. From that perspective, the mutual interests of trade can be leveraged to design and implement equitable, science-based, internationally-agreed upon trade policy rules for sustainable agriculture that help to mitigate the challenges of a changing climate.

While there remain significant areas of uncertainty regarding the applicability of certain WTO provisions to sustainable agriculture, there are still many lessons that producers and trade policy makers can learn:

- Domestic subsidy reform was a foundational objective of the Agreement on Agriculture. Attempts to further reform agricultural subsidies in order to drive sustainability compliance are possible, but ought to be done very carefully, as they risk destabilizing rural and agrarian economies.
- Diverging agricultural sustainability standards are a critical issue, but the TBT Agreement is limited in its applicability. Greater clarity will be needed on the legality of PPMs and other process-oriented sustainability standards before the role of this agreement can be fully discerned.
- Both the TBT and SPS Agreements, though, have merit in their uplifting of international standard-setting bodies. The SPS Agreement and Codex, in particular, are illustrative of a successful working relationship between industry and supranational organizations in this space. These bodies are particularly critical in minimizing one-size-fits-all approaches.

The European Union should be lauded for spearheading numerous efforts to incorporate sustainable agriculture into trade policy. However, being the first and most aggressive actor in this space does not justify a recalcitrant, unilateral approach to rulemaking. Whether it is the insertion of mirror clauses into FTAs and other trade policies or the design and implementation of EUDR, there are many lessons to be learned about the importance of bottom-up, equitable, science-based determinations from their efforts so far. There is optimism that the Strategic Dialogue denotes a new, more collaborative approach to future efforts to incorporate sustainable agriculture into trade policy.

The global rules-based system of trade is a weighty, Byzantine machine that is often slow to react and arduous to reform. For these reasons, it may seem ill-suited to facilitate solutions to a problem as urgent as a rapidly changing climate. However, these weaknesses can also be strengths. This is a deliberative, methodical system with a tendency towards egalitarianism. As agricultural sustainability standards continue to proliferate and splinter in methodologies, the rules-based system of trade can drive harmonization and consensus, which can ultimately create equity and effectiveness.

Recommendations

Whether you are a policy maker, producer, or producer association, anyone reading this report who is interested in producing greater clarity about the incorporation of sustainable agriculture in trade policy should prioritize the following recommendations:

- Encourage political reengagement with the WTO and advocate for necessary reform to restore it to its status as an enforcer of the global rules-based system of trade. Effective dispute settlement mechanisms will be critical for adjudicating differences in sustainability programs.
- Encourage private industry to learn from the TBT and SPS Agreements and seek to form an independent, international science-based standard-setting body for agricultural sustainability standards. Codex should be particularly considered as an illustrative example of an equitable and effective approach to this process that does not generate one-size-fits-all solutions.
- Urge policy makers to take a global, collaborative approach instead of a unilateral, top-down approach. The rollout thus far of EUDR has only further compounded confusion about the intersection of sustainable agriculture and trade policy. By adopting bottom-up, collaborative approaches, greater clarity, equity and efficacy can be achieved.
- Promote compromise on proposals to reform domestic support trade policies in such that important sustainability considerations and the socioeconomic viability of those employed by agriculture are held in balance.
- Monitor implementation of the Paris Climate Accords commitments in the EU-NZ FTA and the incorporation of the Strategic Dialogue's sustainability benchmarking system in future FTAs to determine new possibilities for sustainable agriculture in FTAs.

References

Agreement on Agriculture. WTO. (n.d.).

https://www.wto.org/english/docs_e/legal_e/ag_e.htm

Agreement on Technical Barriers to Trade. WTO. (n.d.-b).

https://www.wto.org/english/docs_e/legal_e/tbt_e.htm

Better Trade for Sustainable Development: The Role of Voluntary Sustainability Standards. United Nations Conference on Trade and Development. (2021).

https://unctad.org/system/files/official-document/ditctab2021d2_en.pdf

Bellmann, C. (2022). *Trade and Sustainability in the Agriculture Sector: Options for Multilateral Trade Cooperation*. Forum on Trade, Environment & the SDGs (TESS).

<https://tessforum.org/latest/trade-and-sustainability-in-the-agricultural-sector-options-for-multilateral-trade-cooperation>

Businesses Learn About WTO Rules on Agriculture. International Trade Centre. (2023, August 11). <https://www.intracen.org/news-and-events/news/businesses-learn-about-wto-rules-on-agriculture>

Cavero, A.V.. (2024, September). From remarks at 2024 WTO Public Forum: *Cultivating the future: Sustainable practices and digital technologies in Latin American agriculture*. Geneva, Switzerland.

https://www.wto.org/english/forums_e/public_forum24_e/pf24_session_fullpage_e.htm?session=1025

Charts - world trade in agricultural products. WTO. (n.d.-c).

https://www.wto.org/english/tratop_e/agric_e/ag_imp_exp_charts_e.htm

Clay, J. (2016). *Codex Planetarius - Reducing Key Environmental Impacts of Producing Globally Traded Food*. Codex Planetarius | Home.

https://codexplanetarius.org/pdfs/CODEX_PLANETARIUS.pdf

CropLife America. (2022, February 16). *Re: Ref. Ares(2022)1138409 – Application of EU health and environmental standards to imported agricultural and agri-food products*. CLA.

<https://static1.squarespace.com/static/5faee45a363746603d1c6e1/t/60d3819ec6440056b6380a38/1624474015516/CLA+Comments+re+Pesticide+Registration+Review+Risk+Assessment+OPs+2-22-16.pdf>

D’Andrea, B., Degain, C., Eberth, F., Rubínová, S., Snoussi-Mimouni, M., & Xu, A. (2024, April 24). *Data blog - thirty years of trade growth and poverty reduction*. WTO Blog.

https://www.wto.org/english/blogs_e/data_blog_e/blog_dta_24apr24_e.htm#:~:text=Tariff

s%20and%20trade%20costs%20have%20declined&text=The%20simple%20average%20tariff%20applied,cent%20to%208.8%20per%20cent.

Domestic Support in Agriculture: The Boxes. WTO. (n.d.-b).

[https://www.wto.org/english/tratop_e/agric_e/agboxes_e.htm#:~:text=of%20the%20Agreement\).-,Amber%20box,to%20reducing%20these%20support%20levels.](https://www.wto.org/english/tratop_e/agric_e/agboxes_e.htm#:~:text=of%20the%20Agreement).-,Amber%20box,to%20reducing%20these%20support%20levels.)

Emerick, D. (2024, February 23). *What are the Three Pillars of Sustainability.* ESG The Report. <https://esgthereport.com/what-is-esg/the-g-in-esg/what-are-the-three-pillars-of-sustainability/#:~:text=The%20economic%20pillar%20of%20sustainability%20underscores%20the,cost%20of%20environmental%20degradation%20or%20social%20inequality.>

Ensuring codex remains the foundation of the Global Food System. Home | CODEXALIMENTARIUS FAO-WHO. (n.d.). <https://www.fao.org/fao-who-codexalimentarius/home/en/>

Esty, D., & Cima, E. (2024, April 8). *Reshaping WTO Subsidy Rules for a Sustainable Future.* TESS. <https://tessforum.org/latest/reshaping-wto-subsidy-rules-for-a-sustainable-future>

FAO. 2020. *Employment indicators.* FAOSTAT Analytical Brief Series No. 10. Rome. <https://openknowledge.fao.org/server/api/core/bitstreams/3e252e34-08b4-449f-ae70-fd38e3a78533/content>

FAO, UNDP and UNEP. 2021. A multi-billion-dollar opportunity – Repurposing agricultural support to transform food systems. Rome, FAO. <https://doi.org/10.4060/cb6562en>

Free Trade Agreement between the European Union and New Zealand . eur-lex.europa.eu. (2024, March 25). https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:L_202400866

Geller, L., Flach, B (September, 2024). Personal communication. Office of Agricultural Affairs, Embassy of the United States of America, Foreign Agricultural Service. The Hague, Netherlands.

Howse, R. (2024, September). From remarks at 2024 WTO Public Forum: *The WTO at 30: Evolution or Revolution?*. Geneva, Switzerland. https://www.wto.org/english/forums_e/public_forum24_e/pf24_session_fullpage_e.htm?session=1093

IFRS foundation and EFRAG Publish Interoperability Guidance. EFRAG. (2024, May 2). <https://www.efrag.org/en/news-and-calendar/news/ifrs-foundation-and-efrag-publish-interoperability-guidance>

Irschlinger, T., & Tipping, A. (2023, March). *The WTO Agreement on Fisheries Subsidies - A Reader's Guide.* International Institute for Sustainable Development.

<https://www.iisd.org/system/files/2023-03/wto-agreement-fisheries-subsidies-readers-guide.pdf>

Noël, S. (2024, September). From remarks at 2024 WTO Public Forum: *Agricultural Trade and Innovation: How the WTO Agreements Intersect with Sustainable Farming*. Geneva, Switzerland.

https://www.wto.org/english/forums_e/public_forum24_e/pf24_session_fullpage_e.htm?session=1047

OECD (2005), *Environmentally Harmful Subsidies: Challenges for Reform*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264012059-en>.

OECD (2023), *Agricultural Policy Monitoring and Evaluation 2023: Adapting Agriculture to Climate Change*, OECD Publishing, Paris, <https://doi.org/10.1787/b14de474-en>.

Oeschger, A., & Bonanomi, E. B. (2023, April 14). *PPMs are back: The rise of new sustainability-oriented trade policies based on process and production methods*. International Institute for Sustainable Development. <https://www.iisd.org/articles/policy-analysis/ppms-rise-new-sustainability-oriented-trade-policies-process-production-methods>

Population and income drive world food production projections. USDA ERS. (2023, December 11). <https://www.ers.usda.gov/data-products/chart-gallery/gallery/chart-detail/?chartId=108060#:~:text=Under%20medium%20population%20growth%2C%20production,9.75%20billion%20people%20in%202050>.

Rees, E. (2022, March). *Mirror, mirror on the wall, who has the fairest clauses of us all? stress-testing the application of mirror clauses to pesticides*. ECIPE. <https://ecipe.org/publications/applications-of-mirror-clauses-to-pesticides/>

Regulation on Deforestation-Free Products. European Commission. (n.d.). https://environment.ec.europa.eu/topics/forests/deforestation/regulation-deforestation-free-products_en

Schnepf, R. (2019, October). *U.S. Farm Support: Compliance with WTO Commitments*. Congressional Research Service. <https://crsreports.congress.gov/product/pdf/R/R45940>

Schuman Declaration May 1950. European Union. (n.d.). https://european-union.europa.eu/principles-countries-history/history-eu/1945-59/schuman-declaration-may-1950_en

Standards Map. International Trade Centre. (2024). <https://standardsmap.org/en/identify>

Strategic dialogue on the future of EU Agriculture. European Commission. (2024, September). https://agriculture.ec.europa.eu/document/download/171329ff-0f50-4fa5-946f-aea11032172e_en?filename=strategic-dialogue-report-2024_en.pdf

Technical Information on Technical Barriers to Trade. WTO. (n.d.-d).
https://www.wto.org/english/docs_e/legal_e/tbt_e.htm

The process — Stages in a typical WTO dispute settlement case. WTO. (n.d.-e).
https://www.wto.org/english/tratop_e/dispu_e/dispu_settlement_cbt_e/c6s1p1_e.htm

Unger, M. (2017, December 7). *GATT rounds: Who, what when*. Hinrich Foundation.
<https://www.hinrichfoundation.com/research/tradevistas/wto/gatt-rounds/>

U.S. Grains Council. (2023, September). *Corn Sustainability Assurance Protocol*.
<https://grains.org/wp-content/uploads/2023/11/23.08.22-USGC-CSAPV1.1.pdf>

U.S. Soy Export Council, American Soybean Association, & United Soybean Board.
(2022, June). *U.S. Soy Sustainability Assurance Protocol*. USSEC. https://ussec.org/wp-content/uploads/2023/06/SSAP3.2_AMS-Approved-6.8.22.pdf

Valls, R. (2016, August 7). *The European Communities*. CVCE.EU by UNI.LU.
https://www.cvce.eu/obj/the_european_communities-en-3940ef1d-7c10-4d0f-97fc-0cf1e86a32d4.html

Voora, V., Larrea, C., Huppé, G., & Nugnes, F. (2022). IISD's State of Sustainability Initiatives review: Standards and investments in sustainable agriculture. International Institute for Sustainable Development.

Wirtz, B. (2024, September 17). *Why Europe's "Farm to Fork" Policies Collapsed*. Competitive Enterprise Institute. <https://cei.org/blog/why-europes-farm-to-fork-policies-collapsed/>