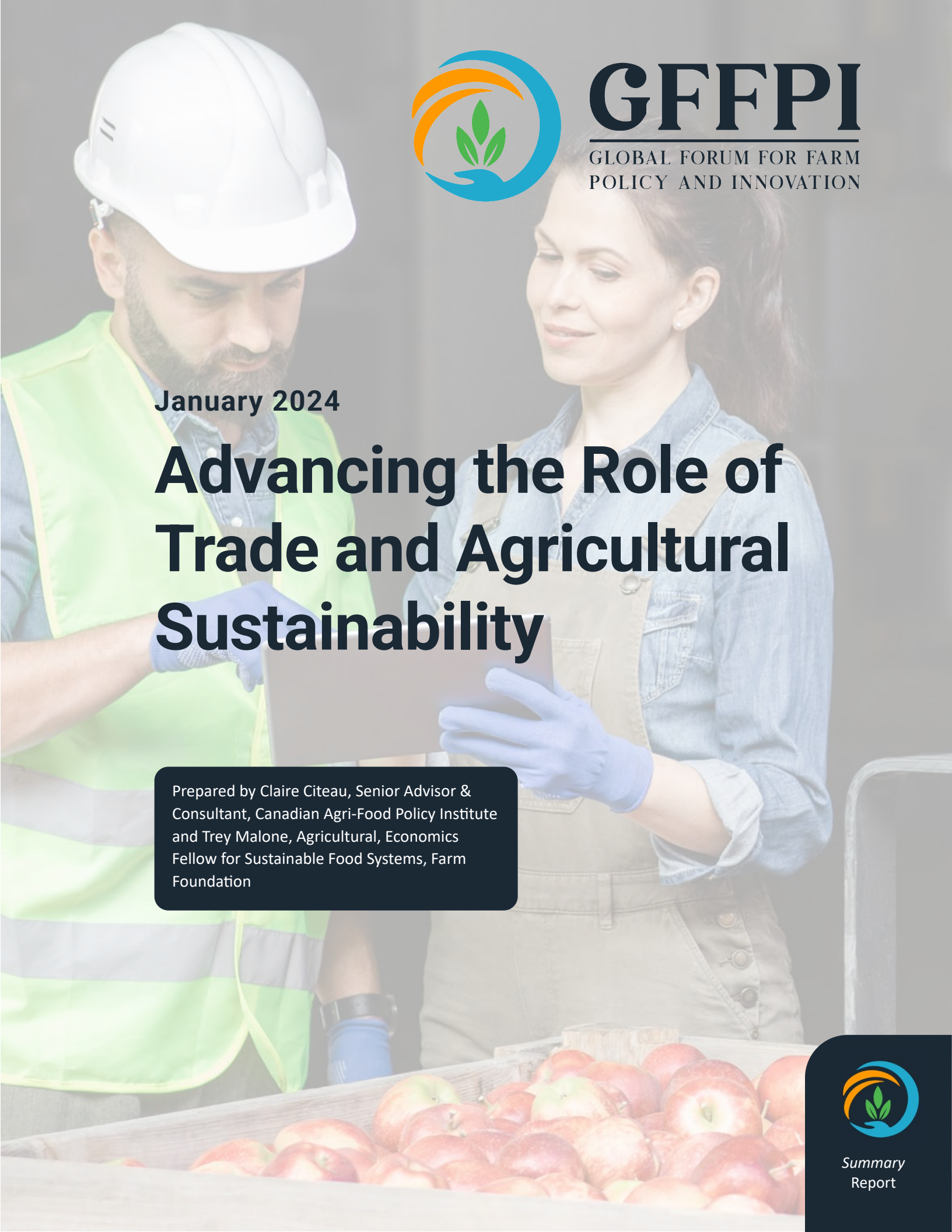

GFFPI
GLOBAL FORUM FOR FARM POLICY AND INNOVATION

January 2024

Advancing the Role of Trade and Agricultural Sustainability

Prepared by Claire Citeau, Senior Advisor & Consultant, Canadian Agri-Food Policy Institute and Trey Malone, Agricultural, Economics Fellow for Sustainable Food Systems, Farm Foundation

Summary
Report

Summary Report of the Inaugural Public-Private Workshop

A Novel Undertaking led by the Global Forum for Farm Policy & Innovation (GFFPI)

Hosted by the Permanent Representatives of Australia and the Netherlands,
together with the Ministry of Agriculture, Forestry and Fisheries of Japan

at the Organisation for Economic Co-operation and Development (OECD)
October 26-27, 2023

Claire Citeau
Senior Advisor, Consultant
Canadian Agri-Food Policy Institute

Trey Malone
Agricultural Economics Fellow for
Sustainable Food Systems, Farm Foundation

CHALLENGE

Are trade policy and agricultural sustainability on a collision course? Or can a new form of trade policy enhance agricultural sustainability? These questions arise as the growing prevalence of sustainability measures by countries worldwide can lead to barriers to agriculture trade and unintended consequences for productivity, sustainability and the environment. The issue of achieving sustainability in agri-food systems has become increasingly urgent internationally, yet policymakers and key stakeholders have yet to agree on ways to achieve this goal. The question of how trade and agricultural sustainability can work in harmony, avoiding unintended consequences, was the key focus of this inaugural GFPPI workshop at the OECD.

EXECUTIVE SUMMARY

A novel initiative led by the Global Forum on Farm Policy & Innovation (GFFPI) brought together representatives from OECD countries and OECD Secretariat, industry, and experts from across Europe, North America, Japan, and Australia to discuss the role of trade and agriculture sustainability in an interactive and thought-provoking format.

The issue of trade and sustainability in agri-food systems has reached a critical juncture globally, marked by tension and competing visions. While agriculture can be a positive tool for sustainability, there are divergent perspectives on the role that trade plays and the varied approaches to improving sustainability. Increasingly, there is a recognition that sustainability should be adapted to local contexts in agri-food systems. This growing fragmentation has implications for trade and policy coherence across jurisdictions. The urgency of addressing this question is underscored by climate change and the lack of a clear multilateral trade policy framework for sustainable agriculture. How these discussions fit in a multilateral context is not clear. To navigate these complexities, global dialogues between public and private stakeholders are urgently needed and yet rarely take place. These necessary dialogues should promote an understanding of how trade and sustainability interact and the impacts of policy approaches on the agri-food system. They should aim to intensify international cooperation to break silos and develop principles and outcome-based metrics on the way forward for sustainable food systems.

More than 80 participants engaged in dynamic discussions on actionable solutions, including creating a global platform for knowledge exchange, better integrating outcome-based approaches in trade policy, and developing shared indicators to measure progress. The workshop also emphasized the importance of data and transparency and the need for collaboration between governments and the private sector globally. This workshop was the first of a series of events planned for 2024 and beyond to foster ideas and bring about convergence on a path forward.

GFFPI is a collaborative platform created by four leading independent agricultural institutes from Australia, Canada, the European Union, and the United States to increase the sustainability of agriculture worldwide. Partners include:

CAPI THE CANADIAN AGRI-FOOD POLICY INSTITUTE

Australian Farm Institute

Farm Foundation Accelerating people & ideas

Forum for the Future of Agriculture®

KEY TAKEAWAYS

Drawing on panel discussions, presentations, and thematic group workshops, the main issues and analytical insights from the workshop are summarized as follows. The workshop allowed for rich discussions throughout the day. The summary captures the most relevant insights at the nexus of trade and sustainability shared during the workshop. The quotes and commentary do not represent the views of the GFFPI, the officials participating in the workshop or authors of this report.

Enhancing food systems and trade through outcomes-based approaches to sustainability

The term 'sustainable agriculture' is **complex** and can be interpreted in various ways. It has evolved from a list of practices to three principles that weave through many definitions. Today, most agree that sustainable agriculture entails **three main objectives**: to be sustainable, agriculture needs to ensure profitability, environmental health, and social and economic equity – today and for future generations.

> *"In an interconnected world, the unilateral adoption of environmental policies in one country can impact the local and global competitiveness of farmers and have an environmental impact in countries not applying such policies."*
>
> *– Workshop participant*

Sustainability in agriculture cannot be approached with a one-size-fits-all mindset. Every region has unique production practices, scales, soils, cultures, landscapes, and environmental conditions. As illustrated by one participant "the impact of land practices alone is different in Europe, Canada or Australia, due to varying types of soil. One practice here will have a different impact somewhere else."

There is a recognition among participants that trade policies should not be **prescriptive** and must recognize that food systems require local pathways adapted to local contexts. One participant further explains how "in an interconnected world, the unilateral adoption of environmental policies in one country can impact the local and **global competitiveness** of farmers and have an environmental impact in countries not applying such policies. This phenomenon is called pollution leakage[1]."

In a fragmented world, misaligned regulations can introduce complexity, costs, and **barriers** for businesses, undermining the role that trade can play in enabling resilience, innovation, predictability, and sustainability. As such, policies intended to improve sustainability can hinder trade's role in achieving resilience, food security, and sustainability. Participants generally agree that "sustainability should not act as a trade barrier" and emphasize that trade and "sustainability can and should be **mutually supportive** rather than work at cross-purposes."

[1] Gruère, G., et al. (2023), "Pursuing higher environmental goals for agriculture in an interconnected world: Climate change and pesticides", OECD Food, Agriculture and Fisheries Papers, No. 193, OECD Publishing, Paris, https://doi.org/10.1787/99d917ab-en.

While trade agreements cannot dictate national policy choices, they can help achieve national objectives while respecting local perspectives. To this end, trade policies should differentiate between goal-prescribing and system-describing sustainability. Sustainability outcomes, not practices, should be considered and integrated in trade policy. One participant explains how "outcomes-based approaches encourage innovation, while prescriptive, unilateral ones hinder progress and should not be a prerequisite for market access."

At a global level, participants highlight the need to ensure that trade is based on a **shared vision** and understanding of comprehensive sustainable food systems. G20 Declarations[2] in recent years have consistently reaffirmed leaders' commitments to promoting sustainable agri-food systems, open and fair trade, and digital innovations for long-term sustainability. Some participants suggest that global sustainability targets should be adapted to local contexts in agri-food systems.

Global standards and guidelines can provide means by which countries improve sustainability in a way that avoids trade distortions and protectionism. Participants describe their vision of a global agreement with overarching goals, standards and principles with regional attribution: "a global agreement on trade principles, with common indicators and sub-indicators reflecting local specificities to measure progress."

> *"We need outcome-based policies and a definition of sustainability as well as metrics, so we develop measurable policies. We need to be factually correct."*
>
> *- Workshop participant*

Overall, there is a widespread agreement for a **global trade policy framework for sustainable agriculture** that would include a vision, common objectives and **trade principles** to guide outputs, and a level playing field with clear and simple **standards** and **metrics** based on science to measure progress. "We need **outcome-based policies** and a definition of sustainability as well as metrics, so we can develop measurable policies. We need to be factually correct." "Sustainability cannot be just language, lofty statements about outcomes without targets that are measured credibly. We need to know and show what we are achieving and making progress on or not." As an example, a participant suggested "evaluating nations based on the impact of their production on soil health rather than just focusing on practices or technologies for export markets. Evidence indicates that improving soil health can positively affect sustainability aspects like water consumption, carbon sequestration, and biodiversity. Can 'improving soil health' be used as a proxy?" Another participant added, "we need to measure progress, not absolute levels."

Participants share the view that metrics should be based on science. Science-based metrics are necessary to evaluate claims as opposed to a single prescribed approach that can lead to discriminatory treatment and lower benefits. One participant adds that "internationally recognized **science-based** regulatory frameworks are also important in this context because they minimize the risk of policy incoherence and uneven treatment that can inhibit trade and reduce economic welfare." It is essential to **engage the private sector** in creating policies and frameworks that recognize local dynamics and guide practical implementation. The private sector has valuable insights, resources, and expertise that can lead to more relevant and

[2] G7-G20 Database: G20 Agriculture Ministers' Meeting Outcome Document and Chair's Summary_17062023.pdf

sustainable solutions, address obstacles and promote implementation. “We need to engage as early as possible in the policy development stage to assess implications of trade.”

Participants unequivocally call for **reduced barriers** and domestic regulations that complement and support trade and sustainability. Participants reiterated the need for “flexibility” and “place-based” policies in reference to local contexts and for standardized metrics in which the three dimensions of sustainability are equally considered. “The challenge is that we lack knowledge, **data,** and metrics about how these complex pathways interact,” support, contradict, and compete with one another. “We are not starting from scratch, but numbers are missing. There is an opportunity to build upon the work of the OECD and bring this to international discussions”. “The OECD and perhaps other international institutions have a unique role to play”.

Ideas and Areas to Explore

- **Create a platform to advance the dialogue and share information** to better understand how trade and sustainability interact, and identify policy efficiencies, pilot programs, etc.
    (1) Build on the work of the OECD to gather data and identify information gaps.
- Research and **identify existing** principles and standards that could be used as models to develop an outcome-based framework for sustainable agriculture.
- Build on G20 Declarations to develop a **shared vision** of the intersection of trade and sustainable agriculture.
- Facilitate **public-private dialogues** with international bodies (WTO, OECD, FAO) to explore the idea of a **global trade policy framework** integrating sustainability outcomes as well as **principles, standards and clear, simple metrics**.
    (1) As a pilot, start with one or two commodities where work or data already exists (wheat, cocoa, coffee).

Intensify global cooperation in support of coherent policies and a global framework for sustainable agriculture.

“Powerful long-term drivers are increasing both the demand and supply of quantified environmental impact information and reporting in food systems[3].” However, the proliferation of different sets of standards among trading partners is creating a **spaghetti bowl** of competing, contradictory trade rules that increase business costs through various compliance costs, traceability requirements, rules, etc. Ultimately, such heterogeneous policies fragment trade in ways that can undermine sustainability and fail to deliver the stability and predictability businesses need. Several participants express concern that **misaligned regulations** also encourage the development of “**protectionist** barriers in the name of sustainability and will likely result in legal challenges at the WTO.” “It will get worse until it gets better.”

Trade is a key area of policymaking relevant to tackling sustainability challenges, and trade policymakers must play their part in supporting **coherent and mutually supportive trade and climate rules**. **Intensified global cooperation** can encourage the **harmonization** of trade rules and help ensure that efforts to improve sustainability do not lead to unnecessary costs or

[3] Koen Deconinck, Marion Jansen, Carla Barisone, Fast and furious: the rise of environmental impact reporting in food systems, *European Review of Agricultural Economics*, Volume 50, Issue 4, September 2023.

disproportionate burdens for businesses, particularly SMEs. International organizations such as the WTO[4] are important in addressing shortcomings and developing a new global framework. A number of participants wonder to what extent the WTO can address this issue at this time.

Part of the challenge in integrating new (environmental, social, and economic) dimensions into international agriculture trade policy is that international discussions are "often largely **siloed**." There is a recognition of a "disconnect between those working on agriculture, trade, and environment. The need to work across departments should be obvious, but it is not always the case." Despite the current limitations of the WTO, many urge greater collaboration and **efficiencies in the international fora**, including the OECD, FAO, and WTO among others. Participants had conflicting views on the WTO: "the WTO will not move this, we should bypass the WTO."

Importantly, the OECD is developing policy indicators to track progress towards more policy coherence on trade and environment. This **leadership** is important and could be replicated in agriculture. Similarly, many suggest the creation of **international standards**, modeled on the OIE or Codex Alimentarius, as a pilot to facilitate the development of common language, principles and guidelines and to reduce risks, enhance outcomes and help avoid disputes.

Agri-food trade is increasingly subject to changing weather patterns, pricing volatility, and supply chain disruptions. While trade is vital to global food security[5] and plays a role in shaping the production, availability, and pricing of food, the "trick is to do better trade to counter disruptions arising from climate events, pandemics, or wars and get the actors and institutions to agree to not interfere with the desirable objectives from trade."

International coordination is imperative moving forward. This is **crucial to mobilize international organizations in shaping global food markets** to help countries adapt to shocks and increase their resilience and competitiveness in ways that support regional differences.

> *"[There is a] disconnect between those working on agriculture, trade, and environment. The need to work across departments should be obvious, but it is not always the case."*
>
> *– Workshop participant*

Participants acknowledge that **geopolitical factors** are part of the challenge. It is widely recognized that "food production, food trade, and food availability have become geopolitical issues. Migration, diseases, and malnutrition are just some of the consequences." "The issue of food security is not only complex but to produce and trade enough, healthy, affordable food with sustainable farming, biodiversity, and water management is a daunting challenge." One participant highlights the

[4] The objectives of the Marrakesh Agreement Establishing the WTO envisioned a global trading system that protects and preserves the environment in accordance with sustainable development.

[5] According to the Potsdam Institute for Climate Impact Research, one in six people around the world depends almost entirely on international trade for the food they eat, a proportion that could rise to 50% by 2050.

imminent important elections and, in a call for unity, suggests an opportunity to present clear, precise recommendations to institutions collectively. “We need to feed information about the importance of the sector to the **highest levels**, and the consequences and costs of feeding, producing, and trading sustainably but also **put forward specific issues and solutions.**”

In the current context, some concede that the path forward is daunting. Overall, participants agree that “we need to find a way forward.”

Ideas and Areas to Explore

- Leverage and build upon the work of the OECD to **measure policy coherence** in agri-food trade.
- Form a larger, independent coalition to promote and intensify **high-level cooperation**.
- Create an **annual international public-private policy forum** at the intersection of trade and sustainable agriculture to build momentum and define the work ahead.
- **Break silos** by advocating for a paradigm shift and a shared vision **among global agriculture, trade, environment and food security officials**.
- Support reflection among stakeholders, academia, and researchers for a broader, inclusive debate.

Optimize Trade to Make Agriculture Sustainable and Profitable

One participant reminds the group that “there are two ways to think about sustainability and trade: first, how can trade support sustainable agriculture; second, how can policies aimed at sustainability facilitate trade?.” Overall, to achieve true sustainability in agriculture, we must address all the complex challenges of meeting current and future food needs, ensuring food safety and affordability, profitability, preserving natural resources, and mitigating climate change. “Trade can contribute in a significant way to meeting all of these very challenges.”

> *“Profitable farms are often better equipped to invest in and benefit from sustainable practices.”*
>
> *– Workshop participant*

The issue of domestic subsidies came up in the context of trade distortions as several participants noted that governments around the world **support agri-food** in a way that **incentivizes unsustainable production** and consumption patterns. Research shows that the majority of farm support (over two-thirds) programs are either **trade-distorting, price-distorting, or harmful to nature and health**[6]. This is a challenge for food systems that adds pressure (and

[6] According to the OECD, support to agriculture reached USD 851 billion per year during 2020-22, while only 13% of that support goes to investments in innovation. OECD (2023), *Agricultural Policy Monitoring and Evaluation 2023: Adapting Agriculture to Climate Change*, OECD Publishing, Paris, https://doi.org/10.1787/b14de474-en.

tensions) on global agriculture trade. According to the FAO, repurposing this support represents a significant opportunity to help transform agri-food systems and improve sustainability[7]. There is general support for policies that reduce market distortions and trade costs to help drive sustainable systems.

Fundamentally, there is a need to **accept that the agri-food system can deliver profitability** for farmers and food manufacturers meaningfully. Ensuring that agri-food activities are economically viable for farmers and their employees is critical. Profitable farms are well positioned to invest in sustainability, as evidenced by the success of businesses and farm operators that have integrated sustainable practices while maintaining or increasing their profitability. One participant explained, "in fact, profitable farms are often better equipped to invest in and benefit from sustainable practices."

> *"If sustainability is a new standard, then we need to consider how we are communicating it to the consumers to ensure that it creates value that they will want to pay for."*
>
> *– Workshop participant*

Participants stressed that improving food systems' **sustainability** must be economically viable and a shared responsibility **at all levels of the supply chain**. Part of the difficulty is that farmers have less power to negotiate the value of their products as it is downstream in the value chain.

There is also a strong emphasis on the need for food systems to deliver sustainable economic productivity **while striking a balance between environmental and economic factors**. This emphasis is underscored by the pressure on farmers to use environmentally friendly practices such as minimizing chemical use, maximizing no-till farming, and reducing grazing. However, these practices can lead to lower yields, reduced pasture growth, and biodiversity loss. The costs[8] associated with these outcomes are often passed on to society and not reflected in food prices or in the economic decisions that farmers make before planting, growing or harvesting. Addressing these costs and finding ways to reduce them could help countries strike the "**right balance among the often conflicting environmental, economic, and social goals**."

Participants note that a more sustainable food system also requires addressing **production** ("incentives for farmers") and **consumption patterns** ("consumers must be willing to pay"). Some participants focused on the role of producers and highlighted the "need to think about ways to make climate-friendly solutions economically attractive for producers." Others spoke about the role of consumers as a driver, as they "play an important role in being willing to pay for sustainable food production" and in making informed choices. "Somehow the consumer at the end has to vote with his/her money in terms of how he values sustainability." "If sustainability is a new standard, then we need to consider how we are **communicating** it to the consumers to ensure that it creates value that they will want to pay for." One suggested making sustainable options the most affordable option for consumers.

[7] Repurposing agricultural subsidies must also address trade-offs among trade, food security, and environmental dimensions.
[8] According to the FAO, agri-food systems generate USD 10 trillion in hidden costs to our health, the environment, and society. https://unsdg.un.org/latest/announcements/hidden-costs-global-agrifood-systems-worth-least-10-trillion

Data, trust, transparency, and metrics are suggested as tools to help integrate the value of sustainability in purchasing decisions so the social and environmental costs associated with food production can be distributed more fairly throughout value chains. "We need to start recognizing the value and quality of sustainability so the burden to pay doesn't fall only on the farmer (or the consumer)."

There is a recognition that agriculture is a contributor to climate change. Still, it also holds the key to the solution as producers play a role in transforming the system. Countries should make **agri-food systems a central focus of their climate ambitions**. One participant stressed that "it is a false dilemma that people must choose between either food security or climate action." As climate change shifts production patterns, trade will be essential to counter these distortions.

Ideas and Areas to Explore

- Change the mindset and educate about the triple bottom line[9].
- Support policies that reduce market distortions to help drive more sustainable food systems.
- Encourage the creation of **incentives and financial support** for farmers improving sustainable outcomes.
- Encourage governments to prioritize agri-food systems as part of their climate ambitions.
- Develop **clear certification standards** to help consumers choose sustainable options.
- Educate consumers about agriculture and food systems as part of promoting sustainability.
- Further explain the role and benefits of trade and sustainable agriculture.

Harnessing data and technology to transform the way we grow and trade food.

New technologies such as robots, sensors, digitalization, AI, climate-smart tech, and satellite data can help improve sourcing, data collection, trade operations, crop growth monitoring, production automation, agronomic forecast analysis, animal welfare, waste reduction, and global market connectivity. **Aligning science and policy** can help ensure that these technologies deliver on their promise of a sustainable food system.

The enthusiasm for technological advances in agri-food lies in part in the **ability to capture, analyze, and exchange data** at all levels of the supply chain. "We are not starting from scratch but are missing data and numbers." Participants stressed the importance of using data and science to

[9] The "triple bottom line" refers to the idea that a firms' performance should not be assessed solely in economic terms, but along three dimensions: social, environmental, and economic (People, Planet, and Profit).

make **informed decisions** and to improve operations at the farm level and across the value chain. "Consider a sustainability version of the Agricultural Market Information System (AMIS)[10]."

They envision a future where everyone along the supply chain can access simple, relevant information about production methods, distribution, trade, and environmental and social impacts. **Digital ecosystems** can potentially increase the efficiency and traceability of trade and value chains while managing natural resources. Sharing data, best practices, and methodologies across sectors and regions through platforms can help achieve these goals. Data and technology can help create **transparency and trust** in the agrifood system, as opposed to "greenwashing." Initiatives that enhance traceability and **accountability** in food production, distribution, and trading processes are of great interest. "Ultimately, the consumer at the end of the supply chain has to vote with his/her money in terms of how he/she values sustainability."

"We are not starting from scratch but are missing data and numbers."

"Consider a sustainability version of the Agricultural Market Information System."

– Workshop participants

Industry is crucial in **implementing solutions** and innovations within the agri-food system. To reap the benefits of technologies that strengthen agri-food systems and trade, **industry engagement** and the participation of various stakeholders, including researchers, service providers, infrastructure operators, and the government, are necessary.

Artificial intelligence (AI) is seen to play a critical role in helping producers fast-track data, evidence, and analysis to improve operations to address sustainability challenges. Policies should address the obstacles that hinder the adoption of technologies by farmers and producers, including the lack of incentives, training, risks, and initial financial investment. **Science** will be critical to developing, assessing, and implementing tools and platforms. The need for science-based metrics to evaluate sustainability claims and progress is essential.

While the issue of **reducing food loss and waste dramatically** throughout the value chain came up a number of times, it came with the recognition that it often relates to certain ("rich") markets and not the majority of the global population. Participants note that agri-food trade and technology play a role in **enhancing circularity** and preventing food waste. To this end, policies must focus on an **enabling environment** for agri-food traders.

Similarly, there is a recognition that sustainable agri-food systems are incentivizing innovation in agri-food trade. Trade can be a powerful circular tool to access technology, increase resource efficiency, invest in clean infrastructure, and accelerate the clean energy transition to climate-resilient systems with reduced emissions.

[10] The Agricultural Market Information System (AMIS) is an inter-agency platform to enhance food market transparency and policy response for food security launched in 2011 by the G20 Ministers of Agriculture following the global food price hikes in 2007/08 and 2010. Bringing together the principal trading countries of agricultural commodities, AMIS assesses global food supplies (focusing on wheat, maize, rice and soybeans) and provides a platform to coordinate policy action in times of market uncertainty.

Ideas and Areas to Explore

- Encourage governments to identify policies that **support technology adoption** to improve the sustainability of agri-food production and trade.
- Encourage the development and adoption of technology to **collect relevant data at all levels of the supply chain,** to support informed decision-making and increase transparency.
- **Create a centralized platform** that facilitates the global exchange of research, best practices, and educational resources among policymakers, researchers, farmers, and consumers.
    - Consider a translation feature to ensure accessibility to information across languages.
- Encourage governments to identify policies and tools promoting the circularity of agri-food and further processing of "food waste."

CONCLUSION

Trade and sustainability are neither mutually exclusive nor a trade-off.

While agri-food systems and trade policies are different around the world and create issues for the global trading system, there are opportunities to enhance positive outcomes through better trade. There is strong recognition among participants that elevating the discussion of the intricacies between agri-food systems, trade, trade policy and sustainability is timely. More data is needed to evaluate the implications on sustainability and trade of policies based on environmental practices. Similarly, more data and information is needed to assess the implications of outcomes-based policies and to identify opportunities to enhance positive outcomes through trade.

The ideas in this report and summarized below don't intend to provide a solution to meeting the world's food system and sustainability challenges. However, they provide practical and immediate steps as part of a larger suite of ideas that appear necessary to advance the dialogue and support actions toward the longer-term changes needed in global agri-food trade. Countries can and will adopt sustainability measures individually. However, realizing the full potential of trade and trade policy to address and improve sustainability will require countries to work together. The path forward lies in part in a better utilization of the global trading system, better integration of sustainability issues in the trade sphere, and stronger international cooperation.

Summary of ideas from GFFPI's initial dialogue on trade and sustainability:

The Need for a Paradigm Shift

- Break silos to develop a shared vision of how trade can facilitate sustainable agriculture.
- Develop an outcomes-based framework, including principles and standards, for sustainable agriculture and trade.
- Educate on the role of trade sustainable agriculture, and the triple bottom line.

Developed through Dialogues and Cooperation

- Facilitate an international public-private policy forum to support a broader debate, generate ideas, and define the work ahead.
- Convene a larger, independent coalition to promote high-level cooperation.
- Create a platform to advance the dialogue and share information to better understand how trade and sustainability interact, and identify policy efficiencies, pilot programs, etc.

Grounded in Data and Evidence

- Build on the work of the OECD to gather relevant data, identify information gaps on how trade and sustainability interact.
- Increase research and engagement to explore how a global trade policy framework integrates sustainability outcomes, principles, standards, and clear, simple metrics.

FURTHER READING

Glauber, Joseph W.; Laborde Debucquet, David; and Piñeiro, Valeria. 2021. Harmonizing and reducing trade distorting domestic support: An analysis of the impacts of new domestic support disciplines at the WTO. IFPRI Project Report November 2021. Washington, DC: International Food Policy Research Institute (IFPRI). https://doi.org/10.2499/p15738coll2.134803

Christophe Bellman; 2019. Subsidies and Sustainable Ag - Mapping the Policy Landscape. Hoffman Center For Sustainable Resource Economy. Published by Chatham House, https://www.chathamhouse.org/sites/default/files/Subsidies%20and%20Sustainable%20Ag%20-%20Mapping%20the%20Policy%20Landscape%20FINAL-compressed.pdf

Régnier, E., Bolduc, N., & Aubert, P.-M. (2023). Greening the agrifood system through the EU budget: can we repurpose agricultural subsidies? Institute for Sustainable Development and International Relations (IDDRI). http://www.jstor.org/stable/resrep52348

Schreefel, L., Schulte, R. P. O., De Boer, I. J. M., Schrijver, A. P., & Van Zanten, H. H. E. (2020). Regenerative agriculture–the soil is the base. Global Food Security, 26, 100404. https://doi.org/10.1016/j.gfs.2020.100404.

Koen Deconinck, Marion Jansen, Carla Barisone, Fast and furious: the rise of environmental impact reporting in food systems, *European Review of Agricultural Economics*, Volume 50, Issue 4, September 2023, Pages 1310–1337, https://doi.org/10.1093/erae/jbad018

Malone, T. & Golan, E. (2023). Limited Understanding and Differing Perceptions of Agricultural Sustainability Point to Need for More Consumer Education. Farm Foundation. Forthcoming.

Alston, J. M., Pardey, P. G., & Rao, X. (2022). Payoffs to a half century of CGIAR research. American Journal of Agricultural Economics, 104(2), 502-529. https://doi.org/10.1111/ajae.12255

Schreefel, L., Schulte, R. P. O., De Boer, I. J. M., Schrijver, A. P., & Van Zanten, H. H. E. (2020). Regenerative agriculture–the soil is the base. Global Food Security, 26, 100404. https://doi.org/10.1016/j.gfs.2020.100404.