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Summary
Report

Summary Report of the Public-Private Workshop

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

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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:



CHALLENGE

Can agricultural sustainability be measured and integrated into global trade policy while avoiding unintended consequences? Should we build an international framework to standardize sustainability measurements and metrics? These questions underscore the growing tension between global trade and sustainability pillars.

As sustainability measures proliferate worldwide, they reshape agriculture and trade, challenging existing rules and policy-making processes. While robust trade can contribute to food security and sustainability, the lack of a global framework has left countries to navigate this terrain independently. Outcome-based approaches have emerged as potential solutions, focusing on sustainability results adapted to local contexts. However, critical questions remain: Which outcomes should be prioritized? How do we align measurements and metrics across borders? How can we enable sustainability and trade without stifling innovation or creating new trade barriers? How do we balance food security, farmers' economic viability, and environmental stewardship? Can we avoid trade-offs?

These issues were the focus of a recent workshop in Washington D.C. hosted by the Global Forum for Farm Policy & Innovation (GFFPI), highlighting the urgent need for a cohesive approach to reconcile conflicting imperatives in agriculture and trade. As different countries and sectors face unique challenges, there is no one-size-fits-all solution to balancing trade and sustainability objectives.

Disclaimer: Drawing on panel and thematic group discussions, the main issues, concepts, and ideas from the workshop are summarized below. 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 the authors of this report.

EXECUTIVE SUMMARY

The Global Forum on Farm Policy & Innovation (GFFPI) convened its second workshop in Washington D.C., bringing together over 70 participants from 17 countries, including government officials, industry representatives, and trade policy experts. This initiative was built on the inaugural workshop hosted at the Organisation for Economic Co-operation and Development (OECD) in Paris, which focused on the ideal state of agriculture sustainability and trade and was summarized in a comprehensive [report](#). This second edition delved deeper into the critical intersection of trade policy and agricultural sustainability: it explored ways to integrate sustainability into global trade frameworks and develop standardized measurements to avoid unintended consequences. This workshop aimed to advance the dialogue on sustainable agriculture in international trade, building on insights from the Paris meeting and pushing the conversation forward.

The workshop highlighted the complexities of balancing trade and sustainability objectives, emphasizing the pressing need to align trade rules with sustainability goals while avoiding unintended consequences.

Participants acknowledged that poorly designed policies could lead to trade distortions or exacerbate existing issues. A key insight was that sustainability initiatives must be practical and aligned with farmers' goals and local conditions. Participants advocated for an outcome-based approach using clear definitions, principles, standards and science-based metrics to bridge global objectives with local realities to achieve this.

Key indicators such as soil health, carbon measures, water usage, and biodiversity were proposed as benchmarks, though further work is needed to define precise outcomes for these indicators. The discussions grappled with fundamental questions, including whose sustainability should be prioritized in trade agreements—the exporting country, the importing country, or global outcomes. Participants also explored the tensions and trade-offs between the environmental, social, and economic pillars of sustainability.

Key findings and ideas to explore include:

- Integrate local conditions to avoid unintended consequences
- Adopt an outcome-based approach to sustainability, starting with soil health, water, biodiversity and carbon measures as benchmarks
- Develop a Sustainable Agriculture Trade Framework with clear definitions, science-based standards and guiding principles
- Strengthen international cooperation to promote policy coherence
- Invest in globally accepted metrics and data management for agricultural sustainability
- Prioritize innovation and technology in sustainable agriculture
- Engage farmers in policy development
- Reframe sustainability as an opportunity

“Climate change is changing everything.”

-Workshop participant

Views on trade policy's role in supporting sustainable agriculture varied, with some seeing it as a powerful lever and others advocating for gradual progress. Policymakers should focus on enhancing policy coherence, improving impact assessments, and fostering international cooperation to develop approaches that support farmer livelihoods, reduce hunger, and mitigate environmental damage.

The Global Forum for Farm Policy and Innovation (GFFPI) leverages evidence and dialogue leading to increased understanding, substantive action, and enhanced outcomes for more sustainable agriculture around the world. GFFPI members include the Australian Farm Institute, the Canadian Agri-food Policy Institute, the Farm Foundation (United States) and the Forum for the Future of Agriculture (Europe).

Sustainable agriculture is generally defined as farming that meets the needs of existing and future generations while also ensuring profitability, environmental health, and social and economic equity. This definition encompasses the three key pillars of sustainability: environmental stewardship, which involves protecting soil, water, air quality, and biodiversity; economic profitability, ensuring farms remain financially viable; and social responsibility, which supports quality of life for farmers, rural development and food security.

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.



Integrating Sustainability into Trade Agreements: A New Paradigm

While there are many definitions of sustainable agriculture, most incorporate the notion that true sustainability must balance economic, social and environmental dimensions¹. Still, there is a recognition among workshop participants that “sustainable agriculture” is often interpreted through an environmental lens.

The complex relationship between trade openness and agricultural sustainability was a key theme throughout the workshop discussion.

Some participants emphasized that “**there is no automatic, inherent link between trade and agri-food sustainability,**” as the impact of sustainability measures varies based on contexts, practices, and commodities. For example, for coffee production, in some regions, increased global demand has led to unsustainable intensification and deforestation, while in others, it has incentivized the adoption of shade-grown coffee practices that preserve biodiversity. Similarly, the expansion of soybean trade has driven large-scale land conversion in parts of South America but has also spurred the development of more sustainable production methods and certification schemes in response to consumer demand in importing countries.

Others offered a counterpoint, emphasizing a more nuanced perspective on the **critical interplay** between trade and sustainability. They argued that robust, well-functioning markets at both local and global levels are essential pillars of food security and sustainability, suggesting that the relationship between trade and environmental outcomes is more complex than initially presented. They pointed to three main areas where government trade policy can directly impact agriculture sustainability:

1. Incorporating environmental and labor chapters in trade agreements, as seen in recent trade negotiations in the U.S.
2. Integrating agricultural sustainability principles into trade agreements, similar to WTO rules on subsidies. This includes evaluating how production incentives affect sustainability and exploring mechanisms like cap-and-trade systems to manage potentially distorting subsidies.
3. Reducing regulatory barriers to trade that extend beyond borders, such as harmonizing measures like sanitary and phytosanitary measures (SPS) and minimizing technical barriers to trade (TBT).

¹ The Food and Agriculture Organization of the United Nations (FAO) defines sustainable agriculture as the management and conservation of the natural resource base, and the orientation of technological and institutional change in such a manner as to ensure the attainment and continued satisfaction of human needs for present and future generations.

The US Department of Agriculture defines sustainable agriculture as an integrated system of plant and animal production practices designed to meet current food and fiber needs while enhancing environmental quality, ensuring economic viability, and improving the quality of life for farmers and society.

Trade policy offers a powerful set of tools to promote more sustainable agriculture. Governments can use various trade-related measures such as tariffs, subsidies, voluntary or mandatory regulations, and international support to incentivize sustainable practices and discourage unsustainable ones.

Achieving food security sustainably, in environmental, economic, and social terms, is a significant challenge. There are differing perspectives on which aspect of sustainability should take priority when trying to produce more with less. This workshop built on an initial event held at the OECD in Oct 2023, summarized [here](#).

The discussion highlighted the **tension** between the pillars of sustainability and the trade-offs between environmental and socioeconomic factors. For example, opening European markets to Brazilian beef could lead to more efficient resource use in Brazil, but it may also contribute to deforestation and increased greenhouse gas emissions. This raises the question of **whose sustainability is prioritized** in trade agreements—the exporting, the importing country or the global outcome?

One of the challenges in global trade and agriculture is that sustainability measures are often seen as trade barriers rather than enablers, creating tension in policymaking. Farmer protests in Europe highlight this perception of complex **trade-offs** between stringent climate commitments and increased market competition. This raises the question of how to shift the paradigm so that sustainability measures more concretely create opportunities rather than lowering farm incomes and restricting trade.

“There is no simple solution to this other than demonstrating that even if trade is not the solution, it's certainly not the root of the problems that farmers face.”

– Workshop participant

Participants generally agreed that support from government is needed to assist farmers in transitioning to more sustainable practices without compromising their livelihoods.

To date, attempts to use free trade agreements to promote agriculture sustainability have seen limited success as trading partners traditionally resist extensive sustainability provisions, as seen in agreements involving Mexico, Mercosur, and Australia. However, this is starting to shift, as observed in the most recent trade negotiations and agreements involving the UK, the EU, and New Zealand².

The discussion traced the evolution of trade policy approaches to sustainability. Initially, trade and non-trade objectives were separate; then, sustainability goals started to be incorporated into trade agreements. Today, the limitations of existing trade tools in achieving sustainability goals are more recognized.

A consensus emerged among workshop participants that trade policy alone cannot serve as a panacea for sustainable agriculture. Some suggested that the focus should be on improving domestic policies and strengthening international cooperation beyond trade agreements, while others

² The NZ-EU trade agreement signed in 2023 was characterized as setting precedence on environmental objectives.

emphasized developing trade policies that incorporate **sustainability principles and avoid overly prescriptive measures** for farmers.

“What strikes me in this discussion is the importance of balance between effective trade and the increasing agricultural demands worldwide, especially in the face of climate change and other challenges. I am struck by the critical importance of maintaining this balance.”

– Workshop participant

Most agreed on two main priorities: supporting strong and effective trade and incorporating broader principles and objectives into trade policy. These broader principles include promoting open trade, encouraging a level-playing field, implementing science-based regulations to encourage innovation, and promoting voluntary and incentive-based measures. The focus was on developing an approach that is objective-oriented and principle-based rather than overly prescriptive to ensure that sustainability can be effectively integrated into trade policy.

“We need agricultural policies that keep markets open for trade and encourage technology and innovation, which is essential for sustainable growth. So together, we can come behind a common set of principles and take action to build these more sustainable, equitable, and resilient food systems.”

– Workshop participant

The introduction of an **"outcomes-based approach"** emerged as a potential solution to better incorporate the complexities of delivering and measuring sustainability across diverse agricultural systems worldwide. This approach prioritizes the **'why'** – the purpose and impact of sustainability measures – over the **'what'** and **'how'** of implementation, allowing for greater flexibility and innovation in achieving shared global sustainability goals, such as improved soil health, biodiversity, and reduced environmental impact, while accommodating diverse agricultural contexts.

One participant noted that Australia has developed a sustainability framework³ based on an outcomes-based approach. This framework sets principles and criteria to achieve sustainability goals and communicates the country's agricultural sector's sustainability status and objectives to domestic and global markets. It aligns with global sustainability standards,

An outcomes-based approach to sustainable agriculture generally focuses on measuring specific environmental, economic, and social results rather than prescribing farming practices. It uses measurable metrics like soil health and biodiversity levels, contrasting with input-based methods that mandate specific actions without assessing effectiveness. This approach encourages innovation and adaptation to local conditions, ensuring environmental investments yield tangible results. However, it may require sophisticated measurement tools and introduce some uncertainty for farmers. Proponents argue that this method incentivizes farmers to improve environmental performance, rather than simply rewarding the use of specific practices assumed to be universally beneficial.

³ The Australian Agricultural Sustainability Framework
<https://www.farminstitute.org.au/the-australian-agricultural-sustainability-framework/>

accommodates various commodities and production systems, and promotes **consistency** across frameworks.

Some participants emphasized the importance of maintaining flexibility at the local and farm levels. They noted a shift in the approach to engaging with farmers on sustainability. In the past, interactions were more prescriptive and focused on telling farmers what they should do. However, there is increasing interest in science-based, voluntary, and incentive-based programs, which the farming community is more receptive to. For instance, farmers should be able to choose and participate in carbon reduction programs without being overly constrained in their farming methods.

“The key is to avoid being overly prescriptive. If we implement excessively rigid measures in the name of sustainability, we risk limiting the flexibility farmers need in each country, region, and individual farm to address their specific economic and environmental challenges.”

- Workshop participant

One participant reminded the group that while trade is often overlooked, it is a **crucial tool** in responding to the dual global challenges of climate and food security.

“Well-functioning trading systems can move surplus to areas of deficit, and as climate shocks in the agricultural system increase, having a system on what good trade policy looks like is becoming increasingly critical.”

- Workshop participant

The record heat waves highlight the urgent need for action. It was noted that agricultural productivity has been reduced by 21% in the last 60 years due to climate change⁴, equivalent to losing the last seven years of growth. Africa and Latin America show the biggest decline, with a productivity growth gap at an alarming 30%⁵. Up to 30% of global farmland may become unusable by the century's end⁶. Climate change poses unprecedented challenges to global agriculture, threatening sector resilience, food security, and trade while severely impacting producers' risk management capabilities.

*“There is no status quo. Research⁷ found that maintaining current **production efficiency** through 2050 would require clearing most global forests, causing mass species extinction, and releasing enough emissions to surpass Paris Agreement targets, even if all other human emissions ceased.”*

- Workshop participant

⁴ <https://www.nature.com/articles/s41558-021-01000-1>

⁵

⁶ According to the United Nations Intergovernmental Panel on Climate Change

⁷ <https://www.usda.gov/oce/sustainability/spg-faqs>



Measuring Sustainability Outcomes

A critical insight from multiple studies from the OECD, WTO and others is that poorly designed policies can inadvertently lead to trade distortions or negative environmental impacts, undermining the very sustainability objectives they aim to achieve. The complexity of this challenge is further compounded by the fact that there is **no one size fits all**: different countries and sectors face unique contexts and challenges in striking a balance between trade and sustainability objectives, necessitating tailored approaches.

One example is carbon leakage. This phenomenon occurs when Policies implemented in one jurisdiction to curb emissions may inadvertently lead to carbon leakage, where emission-producing activities are transferred to regions with less stringent environmental regulations, potentially undermining global efforts to reduce greenhouse gas emissions.

“In a globalized economy dominated by highly integrated supply chains, addressing cross-border challenges requires coherent policy approaches across jurisdictions. Solutions require recognizing the global nature of both agricultural trade and environmental challenges.”

-Workshop participant

The workshop discussed challenges in measuring sustainability outcomes in agriculture, emphasizing the need for **consistent measurements** across diverse farming systems and geographies while also exploring the tension between practice-based and outcome-based measurements.

“We are trying to wrap our heads around how to measure sustainability and how to do so in a way that is complementary across borders and different agricultural contexts.”

-Workshop participant

The workshop discussion showed that while most participants agreed on the innate importance of sustainability measurement, there was some controversy over its purpose. Specifically, there was debate over whether the objective is to facilitate market access, meet national requirements, level the playing field, achieve food security, or something else entirely.

The discussion touched on the proliferation of private standards and unilateral trade measures aimed at sustainability, which have created a fragmented regulatory landscape⁸. Participants noted that the **lack of a universal benchmark** complicates producers' efforts to navigate sustainability requirements in global trade, potentially undermining the level playing field and the effectiveness of these well-intentioned initiatives.

“Internationally recognized science-based regulatory frameworks are critical for minimizing the risk of policy incoherence and uneven treatment that can inhibit trade and reduce economic welfare.”

-Workshop participant

The group recognized the difficulty and complexity of developing **globally accepted metrics** for agricultural sustainability. This is due to varying definitions of the term and different farming practices, environmental conditions, and socio-economic contexts across regions. Sustainability outcomes are challenging to measure and are often highly dependent on specific contexts, making it difficult to translate into broader policy.

Participants noted the difficulty in shifting from input-based metrics⁹ to outcome-based measurements, which are often more complex and less familiar. Participants reiterated that an outcome-based approach should not be prescriptive and highlighted the idea of alignment or equivalence rather than harmonization across borders.

There was advocacy to focus on certain indicators as a starting point, such as **soil health, carbon sequestration, water, and biodiversity**. These indicators can be used as a starting point to establish benchmarks, although there is a challenge in precisely defining outcomes related to them.

Participants also discussed the challenges of using improvement as a metric, particularly for practitioners who have long been implementing sustainable practices. One suggestion was to establish accurate baselines to understand current conditions and identify which practices are most effective in enhancing sustainability. Overall, there was clear consensus that outcomes should be driven by a science-based approach and evidence, which participants throughout the workshop reiterated.

“Science-based metrics are necessary to evaluate sustainability claims and the benefits of different farm practices, avoiding discriminatory treatment and maximizing benefits.”

-Workshop participant

⁸ Fast and furious: the rise of environmental impact reporting in food systems, European Review of Agricultural Economics <https://doi.org/10.1093/erae/jbad018>

⁹ Research found that certain types of agricultural support policies, like market price support and payments based on unconstrained variable input use, tended to be the most environmentally harmful. Henderson, B. and J. Lankoski (2019), "Evaluating the environmental impact of agricultural policies", *OECD Food, Agriculture and Fisheries Papers*, No. 130, OECD Publishing, Paris, <https://doi.org/10.1787/add0f27c-en>.

The workshop emphasized the importance of involving farmers in sustainability discussions and ensuring their **economic viability**. Participants stressed the need for open dialogue, education, and cooperation to support farmers. The often-quoted point "farmers can't go green if they are in the red" was reiterated.

Farmers are worried about how increased measurement and reporting requirements will affect their operations and bottom line. It's important to create measurement approaches and sustainability and trade policies that farmers find relevant and acceptable, as their support is crucial for the success of any global trade system.

When considering which outcomes to prioritize in policymaking, the discussion acknowledged the need to address **multiple factors simultaneously**. One participant pointed that "prioritizing one outcome over others can lead to issues, as seen in recent European protests." Another stressed that "there cannot be trade-offs".

This discussion of multiple factors in this area was considered complex, as certain environmental outcomes may not align with social or economic sustainability. One participant referred to a World Bank-IFPRI study¹⁰ that challenges policies promoting "green" practices, such as shifting subsidies to low-emission crops, which might reduce land productivity and agricultural efficiency. These policies could result in negative environmental, social, and economic consequences, such as increased planted areas, higher costs of healthy diets, and reduced economic activity and income. It was suggested that further research is needed to better understand how trade interacts with these measures, including quantifying the harms and benefits.

Others also noted the influence of **global supply chains** and multinational companies in driving change and emphasized the importance of sharing responsibility for sustainability across the entire value chain, not just at the farm level. They highlighted how **private sustainability standards** set by multinational corporations often exceed governmental regulations, potentially creating de facto market access barriers for smaller producers throughout global supply chains.

There was debate about the balance between **using carrots versus sticks** – i.e. "reward-based incentives" and "punitive measures" - to encourage sustainable practices. Additionally, the question of who would act as the "**sustainability police**" was raised, highlighting the complexities of monitoring and enforcing sustainability measures.

Overall, the consensus that emerged was the overall need for better models that can predict outcomes and assist policymakers in making informed decisions, along with systems and frameworks that facilitate collaboration among stakeholders.

"When environmental measures are poorly designed, they can increase costs, destabilize markets, and affect global food security, potentially undermining efforts to mitigate climate change."

-Workshop participant

Notably, the group acknowledges that while trade policy can play a role in promoting sustainability, it shouldn't be **overburdened** with these responsibilities.

¹⁰ The World Bank and IFPRI's "Repurposing Agricultural Policies and Support"
<https://openknowledge.worldbank.org/entities/publication/a3c86032-523e-5975-b15d-8a5dc44e18b9>

The workshop addressed the need for a global framework to standardize sustainability measurements and metrics. Various suggestions were discussed, leading to additional questions.

For example, participants addressed the diverse sustainability frameworks currently in development or use, including carbon intensity formulas being developed in the US, EU deforestation standards, and private retail sustainability metrics. It was suggested that, ideally, there should be a move towards a common set of standards or a framework for **measuring “food system sustainability.”** However, some also questioned whether this is a realistic goal, given the different drivers behind these various initiatives, such as renewable diesel mandates in the US, deforestation standards in the EU, private retail expectations, etc. Some suggested incentivizing known beneficial practices and measuring specific outcomes, recognizing that some practices may have less certain but generally positive outcomes. Some suggested that rather than emphasizing restrictive or punitive trade policies to discourage unsustainable practices, countries should focus on developing trade discussions and frameworks that align and actively promote sustainable agriculture.

Questions also arose regarding which **institutions** are best suited to lead these discussions and whether it is too early to drive for **alignment** or **standardization**.



GLOBAL FRAMEWORKS AND COOPERATION

International institutions are seen to play a vital role in developing a framework for sustainable agriculture trade, developing guiding principles and standardizing sustainability metrics for agriculture and agriculture trade globally. They include:

- The Food and Agriculture Organization (FAO) has developed a Sustainability Assessment of Food and Agriculture Systems (SAFA) framework, providing a standardized approach and language to measuring sustainability across environmental, social, economic, and governance dimensions.
- The Codex Alimentarius Commission, established by the FAO and World Health Organization (WHO), develops international food safety standards that could serve as a model for agriculture sustainability standards.
- The World Trade Organization (WTO) supports these efforts through its Agreement on Sanitary and Phytosanitary Measures (SPS Agreement) and Agreement on Technical Barriers to Trade (TBT Agreement), which reference Codex standards as benchmarks.
- The WTO's Committees on Agriculture, Trade and Environment, and Technical Barriers to Trade could develop rules, principles, and disciplines to facilitate discussions on integrating sustainability metrics into international trade policies.

These institutions could develop a cohesive framework for promoting trade and sustainable agricultural outcomes by fostering dialogue among nations. Their collaborative work is seen as essential for developing consistent language and metrics applicable across various regions and food systems, ensuring effective coordination of trade and sustainability efforts in agriculture, at local and global levels.

“This is an international issue clearly, and it's going to require international solutions. And that for me is an opportunity for renewed trade discussions.”

- Workshop participant

Participants and businesses are quick to stress the importance of international trade in agriculture and the global trading framework and note the **lack of progress** on agriculture and trade negotiations in recent years. One participant sees an opportunity to revive agricultural trade negotiations at the WTO to integrate sustainability into global trade, moving away from punitive measures and towards rewarding and **promoting sustainable agriculture through trade policy**.

The workshop discussed **how** to effectively incorporate sustainability measures into trade policies, whether in “trade agreements, market access conditions, standards, principles, new disciplines and/or WTO rules.”

Participants discussed **where** to integrate outcomes-based sustainability approaches into trade policy and explored existing trade architecture and science-based principles at the WTO or using standards modeled by CODEX or the IPPC. This raised questions about the potential involvement of UN SDGs and bodies like FAO and WTO. Some proposed creating a new WTO committee on sustainability modeled after SPS and TBT frameworks, which received significant support despite the political sensitivities and a sense of “inertia” at the WTO. Some suggested that the existing SPS Committee should be able to take this on “with the right support and the right leadership, one sector at a time.”

The discussion about integrating quantified sustainability measures into global trade policy was seen as complex and challenging. While the group recognized the importance of this integration, there wasn't a clear consensus on its feasibility. Some participants viewed it as a crucial next step, acknowledging that once sustainability impacts (both positive and negative) can be quantified, they should be incorporated into trading rules. One participant described the conversation as “way over my head but extremely interesting.”

A number of participants mentioned that some countries have been hesitant to participate in trade and sustainability talks, but there are signs of this attitude shifting. Participants expressed the belief that countries should collaborate on sustainability issues while also being able to customize their practices to suit their specific local requirements.

The workshop discussion highlighted the tension between top-down and bottom-up approaches to sustainability standards in trade and agriculture. Participants suggested integrating these approaches constructively, acknowledging that “we may need to experiment. It may not be comfortable, but we cannot let perfection be the enemy of the good here. This is imperfect, it's fast moving.” Participants reiterated the need to develop a collaborative framework that incorporates the strengths of both approaches, ensuring standards are both broadly applicable and responsive to specific industry needs.

“There must be a way to combine both approaches rather than allowing them to work against each other.”

– Workshop participant

Another challenge in creating a global framework was the siloed nature of different commodity chains like soil, beef, and biofuels. The idea was proposed that integrating these silos could eventually lead to a robust, durable framework.

The workshop discussion touched on the need to go beyond merely establishing metrics to also tackle how to incentivize and drive change.

Importantly, the discussion reiterated the need to ensure that farmers are engaged and that measures are economically viable for them. Farmers can't focus on environmental issues if they're facing financial difficulties. "Involving farmers is essential for gaining buy-in."

Regional variations in sustainability practices and **inclusive development** were raised, highlighting challenges faced by developing countries. Developed countries focus on reducing carbon emissions, advanced resource efficiency technologies, and shifting consumer behavior. They have stronger regulatory frameworks and financial resources for green infrastructure and renewable energy. In contrast, developing countries may prioritize economic growth and poverty alleviation, often grappling with basic challenges like clean water and reliable electricity access. The implementation of global sustainability frameworks raises significant **equity concerns**, particularly for **smallholder farmers and developing nations**. Stringent sustainability standards can create unintended barriers for small-scale farmers in developing nations. To address these issues, flexible, context-specific sustainability frameworks that consider local conditions and capacities are crucial. International support, including financial initiatives, training, and knowledge sharing, is necessary to overcome barriers and promote environmental stewardship and social justice in agriculture worldwide.

One participant concluded with an important point: "We need to think about sustainability on a global scale. It's not helpful to move harmful farming practices from one part of the world to another. We should aim for better outcomes everywhere."



HARNESSING SCIENCE TO BRIDGE TRADE AND SUSTAINABILITY

A group of participants quickly identified the pathway below to build a global framework for standardizing sustainability metrics and measurements worldwide, determining five essential steps.

1. Identify data deficiencies, particularly in areas like livestock sustainability.
2. Determine which international organizations should lead efforts based on their expertise.
3. Recognize that different sustainability aspects may need management by various international bodies (similar to existing systems for animal health, plant health, and food safety).
4. Involve all stakeholders (private sector, governments, producers, consumers, NGOs) to ensure diverse perspectives and consensus.
5. Retain the adaptability to modify goals and plans in response to new information or difficulties.

The discussion centered on the difficulties of quantifying sustainability in agriculture worldwide. It highlighted the importance of establishing infrastructure to **safeguard data** rights, security, and accessibility. The conversation also stressed the need to develop capabilities and provide the public with reliable data sources. Additionally, it emphasized the significance of ensuring fair access to measurement tools, such as proximal measurements and remote sensing technologies.

Some participants suggested that practice-based measurement could act as a transitional step toward outcome-based measurement. They recognized the tension between data, accuracy, integrity, and the need for speed and scalability.

It was noted that countries implementing environmental standards need to consider **varied capacities of farmers** to comply. Support for the poorest to adjust to new standards is essential to ensure that aggregate gains are distributed fairly. Smallholder farmers in the global South may find it challenging to adjust to new standards, (e.g. due to a lack of infrastructural capacity or data management systems). International support is needed to ensure that this does not become a barrier. Financial initiatives as well as training and knowledge sharing are necessary to support this transition.

The workshop failed to come to a consensus on which international organization could develop these standards and build confidence in a new approach, whether the WTO, FAO, UNCTAD, or a new entity. Participants underlined the significance of transparent, science-based metrics and warned against jumping too quickly into any one set of metrics without first aligning them with the trading system.

The workshop emphasized the importance of **using data-driven methods** to assess and enhance agricultural sustainability. Participants noted an increase in funding for initiatives supporting climate-smart agriculture, forestry practices, and carbon sequestration and other **voluntary, and science-based** initiatives.

An important tool for evaluating, monitoring, and verifying sustainability efforts, especially in carbon sequestration initiatives, is the **MMRV (Measurement, Monitoring, Reporting, and Verification)** framework. By implementing MMRV, stakeholders can ensure accountability, accurately measure the impact of sustainable practices, and provide reliable data to support market-based incentives.

The workshop focused on how to develop and implement measurement systems that are relevant and supportive to farmers. It emphasized the importance of involving farmers in the early stages of system development and considering the challenges they face worldwide.

“What will it take to do this in a way that makes sense to farmers?”

-Workshop participant

For any sustainability-based trade system to succeed, it must have the **political support** of farmers and other stakeholders. The main takeaway was that sustainability initiatives need to be **practical, beneficial**, and aligned with farmers' goals and operations, rather than being imposed from outside without considering local conditions.

In agriculture, cost-effective and efficient data collection can be particularly challenging, especially in resource-limited regions. Smallholder farmers frequently lack access to modern equipment, reliable internet, and the technical expertise necessary for gathering comprehensive data. As a result, this can lead to incomplete or inaccurate information, complicating efforts to assess the true impact of agricultural practices on sustainability. Furthermore, when the burden of data collection disproportionately falls on farmers, it raises concerns about potential **“greenwashing.”** Companies may make sustainability claims based on limited or misleading data, which do not provide genuine benefits to the agricultural community and could misrepresent the actual environmental impact of their practices.

The conversation also covered the critical role that governments play in advancing agricultural sustainability, especially when it comes to direct support systems like on-farm extension services. These services were noted to be crucial for assisting farmers in successfully implementing desired practices and facilitating measurement and data collection.

Participants reiterated that measuring environmental factors (such as clean air, soil, water, and biodiversity) is important and that these can serve as proxies. However, this approach presents difficulties due to scale variability. Larger-scale data is often used for policymaking, while small-scale data captures specific variations that are frequently lost when aggregated.

“The issue with natural systems is our extreme reliance on scale. While scaling up can reveal more general trends, it also increases the chance of missing important local details.”

-Workshop participant

Although there is data on agricultural sustainability, a large portion of it is of low quality and poorly managed, according to an expert participant. The specialist emphasized the significance of being explicit and posing targeted research questions, highlighting the necessity of effectively communicating the research questions and related data.

“Well-managed, high-quality data is essential. It is also very important to clearly define the question and then give science a chance to create those measurements.”

-Workshop participant

The workshop discussed how consumer attitudes and behavior towards sustainable food purchases differ, with consumers prioritizing their own interests over environmental concerns. Marketing sustainability in the food industry has been challenging due to the lack of recognized standards. As a result, the focus for products like regenerative beef is shifting from environmental benefits to personal advantages, such as health benefits.

Advancements in **remote sensing and data-driven** approaches offer promising solutions for global measurements. Satellite imagery, drone-based sensors, and mobile applications can provide valuable information on crop health, soil moisture, and land use changes. However, careful **data stewardship** is essential to ensure that farmers maintain control over their data and benefit from the insights. Public-private partnerships and community-based approaches could help distribute the costs and benefits more equitably, translating sustainability efforts into tangible improvements for farmers and communities.

IDEAS TO EXPLORE

This section summarizes key ideas suggested for integrating sustainability into agricultural trade. These proposals aim to promote sustainable practices without creating new barriers or disadvantaging farmers. By focusing on outcomes-based approaches, standardized metrics, and international cooperation, we can develop frameworks that support both sustainability and trade efficiency. Engaging farmers in this process ensures that initiatives remain practical and aligned with local conditions.

1. Developing a Global Trade and Agriculture Sustainability Framework

- Investigate the feasibility of creating a global, coherent framework with a clear definition of sustainability in agriculture, guiding principles, standards, and outcomes.
- Review and synthesize existing standards from organizations like FAO's Codex Alimentarius and WTO's SPS Committee to develop a common set of outcomes and metrics applicable across different regions and agricultural sectors.
- Explore the development of science-based, voluntary standards that encourage farmers to shift toward sustainable outcomes while maintaining flexibility in their farming methods.

2. Implementing an Outcome-Based Approach to Sustainability

- Investigate how an outcomes-based approach could be implemented in global trade policy to allow for flexibility across diverse agricultural contexts or sectors
- Examine sectoral and regional models that can simultaneously address environmental, social, and economic sustainability factors in agricultural trade policies.
- Explore practical ways to shift from input-based to outcome-based sustainability measurements in agriculture. This could include establishing baselines and tracking improvements over time.

3. Measuring and Standardizing Sustainability

- Identify and develop a set of globally accepted, science-based metrics for key sustainability indicators such as soil health, carbon sequestration, water use, and biodiversity as a starting point.
- Investigate the feasibility of creating a unified, science-based system for measuring agricultural sustainability across different regions and sectors, perhaps with various sustainability aspects under different international bodies' management.
- Examine the potential of advanced technologies like remote sensing, satellite imagery, and mobile applications in collecting and analyzing agricultural sustainability data.

4. Balancing Trade and Sustainability

- Examine trade-offs and strategies for integrating sustainability principles into trade agreements without creating new trade barriers or compromising food security and farmers' economic viability.
- Analyze how trade agreements can be structured to promote sustainable agricultural outcomes, including exploring case studies where countries have successfully integrated sustainability principles into their trade policies.
- Investigate methods for incorporating quantified sustainability outcomes into global trade policies, studying the role and principles of international organizations like the WTO, FAO, OECD or UNCTAD in developing these standards.

5. Promoting International Cooperation and Alignment

- Examine potential mechanisms for aligning, harmonizing or establishing equivalence between different countries' sustainability standards in agricultural trade.
- Study the role of international institutions in facilitating alignment and exploring how to create a level playing field.
- Analyze strategies to address the disparities in sustainability implementation between developed and developing countries.

6. Engaging Farmers and Addressing Equity Concerns

- Explore effective strategies for involving farmers in the development and implementation of sustainability measures, potentially leveraging on-farm extension services.
- Study the implications of sustainability standards on smallholder farmers and research how designing flexible frameworks can accommodate local conditions and capacities.

7. Improving Perception and Implementation of Sustainability Measures

- Explore strategies to shift the narrative and promote sustainability as an opportunity for trade rather than a barrier.
- Investigate how global frameworks and international cooperation can enhance agricultural sustainability while promoting open trade and addressing climate change impacts.
- Assess how different stakeholders can collaborate to create standards that are both broadly applicable and responsive to local needs, potentially leading to innovative solutions that balance global goals with local realities.

8. Enhancing Policy Coherence and Impact Assessment

- Develop decision-making tools that help policymakers understand and navigate potential trade-offs between different sustainability objectives.
- Focus on enhancing policy coherence, improving impact assessments, and fostering international cooperation to develop integrated approaches.
- Investigate the feasibility of creating a unified, science-based system for measuring agricultural sustainability across different regions and/or sectors, perhaps with various sustainability aspects under different international bodies' management.

THE PATH FORWARD

The workshop highlighted the complex interplay between trade policy and agricultural sustainability. To make meaningful progress, government, industry, and policymakers must rely on evidence and science and must take concrete steps to better align sustainability goals with trade frameworks.

The following takeaways outline a roadmap for actionable steps forward:

- **Develop a Sustainable Agriculture Trade Framework with Principles and an Outcomes-Based Approach:** Develop and include flexible, science-based sustainability principles for policymakers and define clear sustainability outcomes to incorporate in trade policy rather than prescribing specific practices.
- **Improve Measurement and Data Management:** Significant investment is needed to develop globally accepted, science-based metrics for agricultural sustainability. Collaboration among international organizations, governments, and research institutions can create consistent indicators for different agricultural systems by leveraging remote sensing, technology, and real-time tracking.
- **Strengthen International Cooperation:** Enhanced global collaboration is essential for developing standardized sustainability frameworks that can be seamlessly integrated into trade agreements. The WTO, FAO, and other relevant bodies should establish a joint working group focused on harmonizing sustainability standards and their application in trade policy. This group could also facilitate knowledge sharing and capacity building among member countries.
- **Reframe Sustainability:** Rather than viewing sustainability requirements as potential trade barriers, policymakers should position them as opportunities to enhance market access and competitiveness. This shift in perspective can drive the development of trade policies that actively support and incentivize sustainable agriculture.
- **Prioritize Innovation and Technology:** Policies that support open markets for agricultural technologies and innovation are crucial for sustainable agriculture growth. Governments should increase funding for research and development, focusing on sustainable intensification, precision agriculture, and climate-resilient crop varieties. International cooperation on technology transfer and best practice sharing should also be strengthened.
- **Engage Farmers in Policy Development:** Governments should establish formal consultation mechanisms to involve farmer organizations in trade and sustainability policy discussions. Additionally, supportive policies and financial mechanisms should be developed to assist farmers in transitioning to sustainable practices without compromising their economic viability.

FURTHER READING

[ECIPE Report: The Role of Trade Policy in Promoting Sustainable Agriculture](#)

[FAO Report: The State of Agricultural Commodity Markets 2022 - The Geography of Food and Agricultural Trade: Policy Approaches for Sustainable Development](#)

[Forum for the Future of Agriculture – A Call to Action: Building a More Resilient and Sustainable Food and Agriculture System](#)

[Getting Sustainable Food to Consumers: The Trade Imperative](#)

[GFFPI Advancing the Role of Trade and Agricultural Sustainability](#)

[Government of Australia: Reforming Agricultural Markets to Support Emissions Reductions](#)

[IFPRI Report: 2022 Global Food Policy Report: Climate Change and Food Systems](#)

[International Institute for Sustainable Development \(IISD\) Report: "Standards and Investments in Sustainable Agriculture"](#)

[OECD-FAO Agricultural Outlook 2024-2033](#)

[OECD Report Sustainable Agriculture and Trade](#)

[Sustainable Agricultural Productivity Growth: What, Why and How](#)

[UNCTAD Report: Trade and Environment Review 2021: Trade-Climate Readiness for Developing Countries](#)

[UNEP Report: Global Environment Outlook](#)

[USDA Economic Research Service: "International Trade & Agriculture](#)

[World Bank Report: The Changing Wealth of Nations 2021: Managing Assets for the Future](#)

[WTO Report Fostering Cooperation on Sustainable Agriculture and Trade at the WTO](#)