

WEBINAR SERIES

Moderator: Doaa Abdel-Motaal

**WTO**

# Trade Dialogues on Food

Big Take-Aways, A Very Quick Read

Volume 2  
(2023-2026)

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## PREFACE

The aim of the WTO Trade Dialogues on Food is to create a conversation around the role of international trade in food security. The Trade Dialogues on Food invite experts from governments, non-governmental organizations, businesses, academia, think tanks and foundations, to debate the most topical issues in food trade. Each year the international trading system moves enough wheat, maize, rice and soybean to feed approximately three billion people around the globe. Meanwhile, 190 million tons of fertilizer applied to farmland annually play a key role in helping us grow enough food to sustain our expanding population, with much of it traded on the international stage. Climate change will make international trade even more central to food security, acting as a vital conduit for food from food-surplus to food-deficit nations in the wake of natural calamities. The Trade Dialogues on Food are designed to shed greater light on the complexity of the food trade nexus, creating a safe space for public policy debate.

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## BIG TAKE-AWAYS

The “Big Take-Aways” seek to identify some of the most salient points made during the course of past dialogues, and are intended to act as a resource for trade experts and scholars. They are, however, only an informal set of notes and are done entirely under the WTO Secretariat’s own responsibility.

**WEBINAR SERIES**

Moderator: Doaa Abdel-Motaal

# **Trade Dialogues on Food**

**Big Take-Aways, A Very Quick Read**

Volume 2

# The WTO Trade Dialogues on Food

## Big Take-Aways, A Very Quick Read

### Volume 2

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# High Tech Foods and WTO Rules

Moderated by **Doaa Abdel-Motaal**, Senior Counsellor, WTO Agriculture and Commodities Division

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## THE TEAM

**Shir Slutzky**, Deputy Permanent Representative to the WTO, Permanent Mission of Israel

**Maximilian Marquart**, CEO Planet A Foods

**Phil Webster**, Principal, Global Technology & Innovation, Arthur D. Little

**Nir Goldstein**, Managing Director, Good Food Institute, Israel

**Gabrielle Marceau**, Senior Counsellor, WTO Research Division

**Christiane Wolff**, Counsellor, WTO Agriculture and Commodities Division

## Big Takeways, A Very Quick Read

In the context of the future of food, this webinar was designed to explore how the WTO can best accompany high tech foods. These foods solicit all aspects of the WTO rulebook from trade in goods, to trade in services and intellectual property rights.

- The webinar made clear that the food of the future will look nothing like today's, and that agriculture itself is being revolutionized. Speakers spoke of robotic farms, integrated crop protection systems, sensors in fields for data collection and the quick identification of diseases, and the application of machine learning and algorithms to agriculture. The Israeli Deputy Permanent Representative spoke of the 3D printing of beef in Israel; a country with the highest number of start-ups per capita which is trying to respond to its challenging soil and climatic condition, and the climate crisis.
- The entrepreneurs and innovation experts on the dialogue made a compelling case for the need for food system change and innovation. Planet A foods indicated that it was trying to create alternatives for palm oil and cocoa so as to reduce deforestation, decrease biodiversity loss and address child slavery. It described its mission as that of "decoupling supply chains from scarce natural resources." It added that cocoa production was in trouble anyway with climate change making it harder to grow cocoa in countries near the equator (Ghana and Ivory Coast); adding that most cocoa trees were ageing – exceeding 20 years of age. Cocoa trees were also amongst the most threatened tree species by pests, with cocoa alternatives now becoming necessary to meet growing demand. These alternatives would never displace traditional cocoa, but would co-exist with it to become an additional option for the manufacture of more premium cocoa products.
- The Good Food Institute argued that alternatives to fish, meat and dairy were necessary given the impact of the livestock sector on our climate, and the safety concern they raise with 70% of antibiotics going to animal use. It pointed out that extracting 1 calorie from a cow required a cow to be fed with 40 calories, and that more efficient food/energy systems needed to be found. Israel has become a leading hub for protein innovation, and hosts the world's only two agricultural research centres working in this area.
- Arthur D. Little's innovation expert explained that innovation was also required in response to greater consumer demand for healthy food, for food labels, sustainable and traceable food, and for food more tailored to specific dietary requirements. Currently, it said that approximately 80% of new foods are



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withdrawn for false health claims. Therefore appropriate regulatory environments were necessary to accompany these foods. The areas of focus in food innovation included the meats, flavours, vitamins and fragrances.

- The WTO explained how the WTO rulebook functions, and the number of WTO agreements that are relevant to high tech foods, which go much beyond the Agreement on Agriculture. The rules governing industrial products, the General Agreement on Trade in Services (GATS), and the Agreement on the Trade-Related Aspects of Intellectual Property Rights (TRIPs) were all equally relevant to high tech foods. The Agreements on Sanitary and Phytosanitary Measures (SPS) and Technical Barriers to Trade (TBT) were also explained, with the message being that while the WTO was not a standard-setting body, its goals is to ensure that food standards and regulations do not constitute unnecessary obstacles to trade.
- Emphasis was placed by the private sector on the need for regulatory frameworks that are grounded in science and knowledge, and that can react to innovation with speed, clarity and consistency. Some described the innovation in this sector as a “food tech arms race,” requiring agile regulatory structures.
- The Israeli Deputy Permanent Representative called for dialogue on high tech foods in the WTO, indicating that the Food and Agriculture Organization (FAO) and the World Health Organization (WHO) had recently added a new agenda item to the work of the Codex Alimentarius Commission on “New Food Production Systems.” She argued that the WTO could follow suit, with there being a need to discuss agreements such as the Information Technology Agreement (ITA), the SPS and TBT Agreements and TRIPs. Issues to do with the customs classification of these new foods would also need to be explored.



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# The Black Sea Grain Initiative

Moderated by **Doaa Abdel-Motaal**, Senior Counsellor, WTO Agriculture and Commodities Division

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## THE TEAM

**Dr. Ngozi Okonjo-Iweala**, *Director-General, World Trade Organization (WTO)*

**Mr. Abdullah Dashti**, *United Nations Coordinator, Black Sea Grain Initiative (BSGI)*

**Ms. Alzbeta Klein**, *CEO and Director General, International Fertilizer Association (IFA)*

**Mr. Arnaud Petit**, *Executive Director, International Grains Council (IGC)*

## Big Takeways, A Very Quick Read

This webinar was designed to explore the global food security situation in light of the conflict in the Black Sea region, and to better understand the functioning of the Black Sea Grain Initiative.

- Food security has been a major concern on the international agenda since the outbreak of the COVID-19 pandemic, supply chain disruption, conflict in the Black Sea region, and the uncertain global economic picture. The Black Sea region has been vital to global food and fertilizer security, supplying over 12% of internationally traded calories prior to the conflict.
- Food security has also been a major concern on the WTO agenda, with WTO Members keen to ensure that trade policy would not exacerbate international crises (whatever their cause – pandemic or otherwise) through measures such as export restrictions; but rather would act to ease and protect global supply chains.
- The Black Sea Grain Initiative alongside the Memorandum of Understanding on promoting Russian food products and fertilizers to the world markets, has been critical for global food security, especially for developing countries.
- Abdullah Abdul Samad Dashti, United Nations Coordinator for the Black Sea Grain Initiative, told the Trade Dialogue that some 30.5 million tons of grains have now been exported to 45 countries through the Initiative, with priority for World Food Programme (WFP) shipments to Afghanistan, Ethiopia, Kenya, Somalia and Yemen. This agreement has “contributed very dramatically to lowering global world prices and continues to do so,” he said.
- The renewal of the Initiative in mid-May this year has been greatly welcomed by agricultural markets, and indeed world prices of most grains and oilseeds have started to fall back to pre-war levels. However, the webinar revealed that the renewal of the Initiative beyond mid-July will not be automatic, with some parties wanting reassurance that the Memorandum of Understanding on promoting Russian food products and fertilizer will also be operationalized.
- The webinar demonstrated that, at the global level, the food security situation remains problematic. Prices continue to be high in numerous food importing developing countries because of a weakening of many national currencies against the US Dollar, higher freight costs and other variables.
- According to the United Nations Global Crisis Response Group: “The nature of the crisis has shifted from a fast-moving crisis to a slow-moving cascade of increasing vulnerability and poverty among poor people, especially in low-income settings. All countries are off track in achieving the SDGs and their climate targets.”



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- The jump in food and energy prices triggered by the conflict “has brought a completely new spotlight” on the issue of food security, the Director-General of the WTO told participants. “Many of our developing country members, particularly the least developed countries, are on the receiving end of the crises that are happening in the world. This is something that did not cause but they are the ones who are suffering the most from the lack of access to food, from the lack of access to fertilizer, and from high prices.”
- With one in five calories traded internationally, “imagine how important the role of trade is now in order to help us solve this problem of access, of building resilience and of managing the volatility of food prices and energy prices,” she said. So “the first and best thing is keeping an open, predictable and stable international multilateral trading system. Trade has been absolutely central on the food front, and keeping a predictable, stable and fair system is key.”
- Alzbeta Klein, CEO and Director General, International Fertilizer Association (IFA), said the Black Sea initiative “is tremendously important for global food security” and that the situation regarding fertilizer shipments has improved. Nevertheless, the affordability of nitrogen and phosphates was becoming a more general concern, particularly in sub-Saharan Africa, mainly due to the depreciation of local currencies.
- “One thing that we learned over the past year is that food security, which we took for granted for many, many decades, is actually extremely vulnerable, and it’s much more vulnerable than we ever thought it was,” Ms. Klein said.
- Arnaud Petit, Executive Director of the International Grains Council, gave participants an overview of global market trends for rice, wheat, maize and soybeans. He underlined the importance of the Black Sea Grain Initiative for global food markets. “The Black Sea region represent more than 70 million tons of grains every year, we don’t have another area elsewhere in the world that produces 70 million tons,” he noted. “It’s a very big matter in terms of balancing global grains markets.”

# COP 28 and Food Trade



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Moderated by **Doaa Abdel-Motaal**, Senior Counsellor, WTO Agriculture and Commodities Division

## THE TEAM

**Danielle Nierenberg**, *President, Foodtank*

**Ackim Mwape**, *Africa Programme Lead, The Global Research Alliance on Agricultural Greenhouse Gases*

**Hoe Lim**, *Director, Trade and Environment Division, World Trade Organization (WTO)*

**Tatiana Campos**, *Executive Director, International Fruit and Vegetable Juice Association*

**Joseph Glauber**, *Senior Research Fellow, Markets, Trade, and Institutions Unit, International Food Policy Research Institute (IFPRI)*

## Big Takeways, A Very Quick Read

This webinar was designed to explore the impact of COP28 on food trade, and how international trade can contribute to food system sustainability.

- At COP28, 134 countries signed the *Leaders Declaration on Sustainable Agriculture, Resilient Food Systems, and Climate Action*. Meaning that countries responsible for 76% of total emissions from the global food system agreed to incorporate these systems into their Nationally Determined Contributions by 2025. In this declaration they also agreed by 2025 to, amongst other things:
  - Revisit and re-orient public support for agriculture and food systems towards climate-friendly goals (a matter of great interest to WTO, where there are ongoing negotiations on agricultural subsidy reform); and
  - to “Strengthen the rules-based, non-discriminatory, open, fair, inclusive... multilateral trading system - with the World Trade Organization at its core” (so a recognition that international trade in food has to be part of the climate solution).
- Also at COP28 150+ Non-State Actors signed a corresponding *Call to Action for Transforming Food Systems for People, Nature, and Climate* in which they committed to strong collective response. In their statement they indicated that they see a significant need and opportunity for: “Governments to reorient agricultural policies [and] redirect subsidies away from harmful practices and [to] repurpose public support, [and] address trade, finance and regulatory barriers.” These were two very important outcomes from COP28 of particular interest to the WTO.
- For Food Tank, COP28 represented a major step forward in the integration of food systems into climate discussions, although in future emphasis would need to be placed not just on food production, but on food consumption and food loss and food waste as well.
- The dialogue highlighted that food production is highly vulnerable to the effects of the climate crisis, with research suggesting that as much as a third of global food could be at risk from global heating. At the same time, agriculture and livestock farming are major sources of greenhouse gas emissions, contributing roughly a 10<sup>th</sup> of global carbon output directly, and more than double that figure if the conversion of natural habitat to farming is included. When food production is added to the picture, these emissions rise even further. So the food system is both a culprit and a victim of the climate crisis.



- Trade policy was discussed in the dialogue from a number of different angles, with the Director of the WTO Trade and Environment Division indicating that “battles of the past, must remain battles of the past,” but that Members needed to design a positive trade and environment agenda going forward - in particular in light of the urgency of the climate crisis. The International Food Policy Research Institute (IFPRI) indicated that the repurposing of environmentally-harmful and trade-distorting agricultural subsidies needed to focus on “repurposing” instead of building of new categories of permissible subsidies under the Green Box of the WTO Agreement on Agriculture. It also cautioned that the discussion on repurposing was premised on the notion that countries had subsidies to repurpose, which may not be the case of Least Developed Countries (LDCs). LDCs needed to be assisted in meeting climate goals, so the climate discussion is not centered on the needs of wealthier countries.
- IFPRI also emphasized the important role of standards in this discussion, arguing that there is a need for a new international standardizing body in the climate arena to measure carbon footprint. Carbon standards would ensure an equitable implementation of WTO rules; but it acknowledged that they would need time to build. Such standards would be key since producers want to know that there will be no carbon leakage, and that their foreign competitors are abiding by a similar regulatory framework.
- The Global Research Alliance on Agriculture Greenhouse Gases (GRA) echoed the importance of standards, indicating that they needed to be transparent, science-based and non-discriminatory. Africa, it argued, needed to be assisted in meeting standards rather than penalized, in particular since Africa still needed to ensure food and nutrition security and equitable access to food. The International Fruit and Vegetable Juice Association argued that standards in the field of sanitary and phytosanitary measures (SPS) were essential and that the WTO SPS Agreement played a very important role in levelling the playing field, and in avoiding a fragmented policy response to the climate crisis. It indicated that global supply chains provide an excellent opportunity to multiply best practices in collaboration with smallholder farmers, processors and retailers.
- The WTO explained that Trade Day at COP28 was intended to show, across sectors, the solutions that trade could offer to the climate crisis. Through two reports tabled at the COP (**Trade Policy Tools for Climate Action**, and **International Trade and Green Hydrogen**), the WTO demonstrated that a range of trade policy measures were already being used by countries to achieve climate goals (from trade facilitating measures, all the way to tariffs, subsidies and government procurement) and that more could be done to avoid market fragmentation.



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# COP 28 and Food Trade – Second Edition

Moderated by **Doaa Abdel-Motaal**, Senior Counsellor, WTO Agriculture and Commodities Division

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## THE TEAM

**Sandeep Sengupta**, *Global Policy Lead, Climate Change, International Union for Conservation of Nature (IUCN)*

**Morgan Gillespy**, *Executive Director, Food and Land Use Coalition (FOLU), World Resources Institute*

**Andrea Porro**, *Secretary-General, World Farmers Organization (WFO)*

**David Laborde**, *Director, Agrifood Economics Division, Food and Agriculture Organization (FAO) of the United Nations*

**Edwini Kessie**, *Director, Agriculture and Commodities Division, World Trade Organization (WTO)*

## Big Takeways, A Very Quick Read

This was the second edition of the Trade Dialogue on COP28 and Food Trade, designed to explore further the impact of the COP on this key sector of world trade.

- Participants stressed the need to do away with old dichotomies pitting ‘people’ against ‘planet’ or ‘food security’ against ‘environmental security’.
- The International Union for the Conservation of Nature (IUCN) argued that the only way to transform the food system is by “doing agriculture differently” so as to produce more food while protecting the environment. This would require different agricultural inputs, different methods of working the land, storage facilities and more. Trade and the WTO rulebook would need to act as “levers” by allowing for the transfer of technology and know-how, repurposing of environmentally harmful agricultural subsidies, and limiting the biodiversity impacts of trade (in other words, preventing trade from driving any additional deforestation or habitat loss).
- The Food and Land Use Coalition (FOLU) argued that the agri-food business sector had a key role to play in this transformation. It would need to ‘assess’ its emissions, ‘commit’ to reducing them, and ‘transform’ the food system through concrete actions that it discloses. This would eventually trigger a “virtuous cycle of legislation.”
- The World Farmers Organization (WFO) stressed that farmers’ interests were completely aligned with environmental goals, contrary to what is often reported in the press. Farmers have an economic interest in protecting their soils, conserving their water, and caring for their livestock. In fact, WFO’s Trade Policy was revised by farmers to add provisions on sustainability and climate change. Where farmers take exception is in not having their voices heard in policy circles, and having policies dictated to them.
- The Food and Agriculture Organization (FAO) presented the Roadmap for change that it advanced at the COP explaining that there were no magic bullets for food system transformation, and that the process would need to involve many players and be incremental. It argued that the achievement of the 1.5 degree temperature target of COP 28 would represent no ‘victory’, but rather ‘damage control.’ Furthermore, continuing to pursue a ‘business-as-usual’ approach would only exacerbate existing inequalities, with the poor bearing the brunt of climate change.



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- The WTO walked the audience through the challenges faced in agriculture negotiations and WTO members' fear of unilateral policies. It also explained the achievements made on the question of sustainability at the thirteenth Ministerial Conference (MC13) held in the United Arab Emirates at the end of February 2024.
- Notable on the question of sustainability was the meeting of the Coalition of Trade Ministers on Climate on the margins of MC13; the holding of a first-ever ministerial conversation on trade and environment; and the presentation of the progress made on the three plurilateral initiatives on sustainability (the Dialogue on Plastics Pollution and Environmentally Sustainable Plastics Trade; the Trade and Environmental Sustainability Structured Discussions; and Fossil Fuel Subsidies Reform)



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# Shipping Food Across Borders, Navigating the Chokepoints

Moderated by **Lori Ann LaRocco**, CNBC Business News

## THE TEAM

**Ben Parker**, *Officer in Charge, UN Black Sea Initiative Support Office*

**Iliana Axiotiades**, *Secretary-General, Coceral*

**Doaa Abdel Motaal**, *Senior Counsellor, World Trade Organization (WTO)*

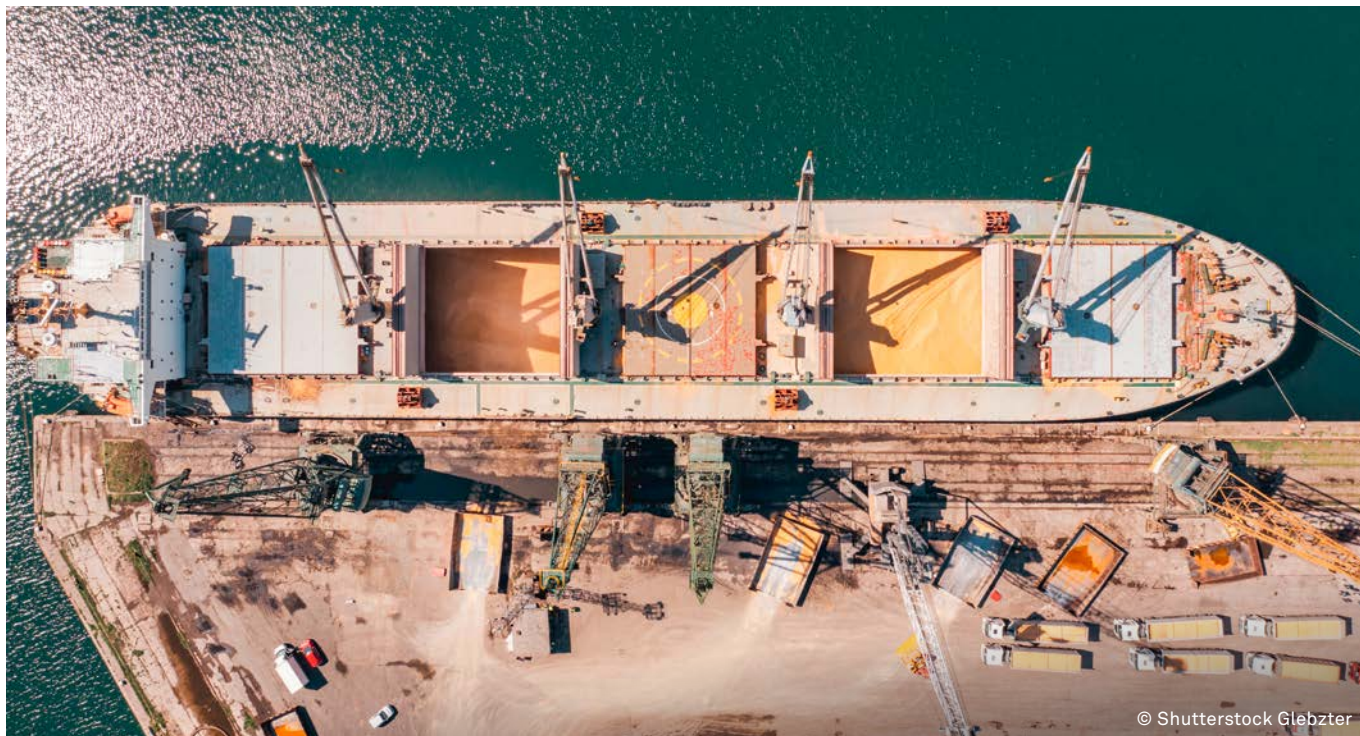
**Silvia De Marucci**, *Maritime Business Strategic Advisor, Vice President of Operations, Panama Canal Authority*

**Jan Hoffmann**, *Head, Trade Logistics Branch, Division on Technology and Logistics, UN Trade and Development (UNCTAD)*

## Big Takeways, A Very Quick Read

This webinar was designed to explore the impact of the situation in the Black Sea, the Suez and Panama Canals on global food security, and to identify the main chokepoints for the movement of food across borders.

- A state-of-play of the Black Sea Grain Initiative was provided, indicating that the initiative was now over but that it did achieve its aims, which were:
  - To unblock the food “in storage” in Ukraine;
  - To provide Ukrainian farmers with the confidence to plant again;
  - To bring down the price of wheat and other commodities (which fell by approximately 20%); and
  - To create a safer environment for shippers.
- Overall, 32 million tons of grain were exported through the Initiative, which is enough food to feed approximately 160 million people. So the Black Sea Grain Initiative was a “humanitarian success” and delivered the socio-economic benefits that it was expected to.
- Since the Initiative was paused, Ukraine moved to a Plan B – exporting agricultural commodities through the Danube. But the Danube could not handle the volumes that were shipping through the Odessa Deep Sea Port.
- The successor to the Black Sea Grain Initiative will aim to provide guarantees of “safe transport” for both Ukrainian and Russian agricultural exports. Both sides must be confident that their ships and crews will be safe.
- The principal stumbling block to developing a new version of the Initiative lies in the fact that the balance of power at sea has changed. Ukraine has made gains and now wants a guarantee of safety. Neither party needs the initiative to be able to trade, since both are currently trading at pre-war capacity, but it is the derisking of trade that is required. The UNSG and Turkey are both working on proposals for safe navigation or essentially, an agreement to “leave each other alone.”
- COCERAL indicated that despite fears of a food security crisis, no crisis emerged because markets and solutions moved quickly (solidarity lanes, re-routing etc). Furthermore, none of these crises have an impact on food safety.



- However, COCERAL pointed to a recent study by the Bank of International Settlements demonstrates that the conflict has created geo-political risks with countries wanting to increase their trade with friends. In a comparison of 32 countries between 2017 and 2023, the study found trade to have increased between allies, and decreased with the rest of the world. UNCTAD indicated that “friend-shoring” can sometimes be the opposite of “near-shoring”, with a higher cost of trade.
- The drought in the Panama Canal was discussed, with the Panama Canal Authority indicating that various water projects were underway to protect the canal. While the Suez Canal is sea waterway, the Panama Canal is a freshwater canal and has a water challenge to contend with. Panama is now climate-proofing the canal, working with the entire maritime value chain to also reduce the Canal’s emissions.
- UNCTAD indicated that for the first time in history, there were more transits through the Panama Canal than through Suez (32 transits per day as opposed to 29 in Suez). It explained that while bulk containers usually move through the Panama Canal (grain, maize, soybean etc), it is processed food that typically moves the Suez Canal in containers. The main problem that emergencies in these canals create is linked to the inelasticity of the shipping market which has a finite capacity; with recent rises in the price of food having all been due to higher shipping costs.
- Discussion took place of the recent incident (12 September 2024) in which a Ukrainian grain vessel in the Black Sea carrying Ukrainian wheat to Egypt was struck by missile. This is being characterized the worst incident in international waters, with the vessel having been significantly damaged. The vessel was UAE managed and had benefited from Turkish investments. Experts indicated that the incident was most likely not a game-changer, since the shipping industry “has a thick skin”.
- Experts pointed however to the dangers associated with vessel “spoofing”, and vessels being sent to wrong destinations, something that was increasingly happening in the Black Sea. This was impacting both maritime and air transport.
- Overall, the dialogue pointed to multitude of chokepoints in food, both political and logistical, but to the capacity of international trade to overcome obstacles. “Like water, trade always find a way to flow,” said the Panama Canal Authority.



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# AgTech & Global Trade Bridging the Future of Agriculture

Moderated by **Doaa Abdel-Motaal**, Senior Counsellor, WTO Agriculture and Commodities Division

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## THE TEAM

**Adam Struve**, Global Lead, Agri-Commodities, International Finance Corporation (IFC)

**Hadar Sutovsky**, VP Corporate Investments, ICL Group & General Manager of ICL Planet Startup Hub

**Shenggen Fan**, Chair Professor and Dean of the Academy of Global Food Economics and Policy, China Agricultural University (CAU)

**Landry Signé**, Senior Fellow, Global Economy and Development, Africa Growth Initiative, Brookings Institution; Executive Director, Thunderbird School of Global Management

**Shir Slutzky**, Deputy Permanent Representative of Israel to the World Trade Organization (WTO)

## Big Takeways, A Very Quick Read

This dialogue was designed to identify the technologies that are critical to the future of food systems, understand where they are produced, and examine the obstacles to their international trade and global dissemination.

- The food system faces a stark paradox. While food production globally has reached record levels, over 730 million people went to bed hungry in 2023, equivalent to one in eleven people globally and one in five in Africa, according to the FAO's latest data. An alarming number, in particular in light of the fact that global population is expected to reach 10 billion in 2050; *i.e.* 2 billion more than today.
- The dialogue emphasized the urgent need to address this challenge, explaining that scaling-up food production using current farming methods would be both resource-intensive and inefficient.
- Panellists agreed that solutions are needed; in particular agtech solutions. The agtech market has been experiencing significant growth, with its value standing at approximately \$11 billion in 2021 and projected to more than double by 2025.
- According to industry figures:
  - One of the most heavily traded segments within agtech is precision farming equipment, which includes GPS-guided tractors, variable rate technology for fertilizer application, and yield monitoring systems. The global market for precision farming was valued at USD\$7 billion in 2021 and is expected to reach \$16 billion by 2027.
  - Another is agricultural robotics, encompassing automated harvesters, drones for field analysis, and robotic weeders. The market for agricultural robots was valued at \$5 billion in 2020 and is projected to grow to \$21 billion by 2025.
  - Additionally, smart irrigation systems, which utilize sensors and IoT devices to optimize water usage, are increasingly being used. The smart irrigation market was valued at \$1 billion in 2020 and is expected to double by 2025.



- Shenggen Fan, from China Agricultural University, indicated that any discussion on agtech had to start by recognizing that international trade in food is vital to global food security and that trade policies needed to remain open, predictable, and transparent. China is both the world's biggest net food-importing country and a major agtech innovator. He explained that China disseminates agtech across the globe through international organizations such as the CGIAR, the FAO, and the WFP, but also through the Belt and Road Initiative, infrastructure projects, and an annual global agtech forum that it hosts each year in October.
- ICL Planet Startup Hub explained that innovation needs to be looked at through the lens of startups. Startups need a reduction of policy uncertainty, transparency, and predictability – together these elements constitute vital pillars of a successful innovation ecosystem. “Regulatory agility” is also becoming vital, to prevent innovation from being stifled by the slow pace of regulatory change.
- The International Finance Corporation added that it is key for agtech to proceed in tandem with “fintech,” i.e., innovation in the financial industry. Financial products such as insurance solutions needed to become more accessible to farmers so as to enable and to de-risk innovation, in particular for smallholders.
- The Africa Growth Initiative emphasized that African agriculture would need help in addressing extreme weather events, in particular given Africa's rapidly rising population. In 2050, 25% of the world's population will be African, with this figure rising to 40% by the end of the century. Artificial Intelligence and big data would be needed in this agricultural transformation, in particular since 60% of the world's arable land lies in Africa.
- The Deputy Permanent Representative of Israel to the WTO explained that Israel is often dubbed the “Startup Nation” because it has the highest number of startups per capita in the world, with most of these companies concentrated in agriculture. In 2022, Israel had the highest R&D spending as a percentage of GDP in the world. The key to Israel's success in agricultural innovation was the pivot to open trade and investment policies in the 1980s. She indicated that the entire WTO rulebook is relevant to the dissemination of agtech across the globe, emphasizing the importance in particular of addressing non-tariff barriers to trade (NTBs). She welcomed the extension of the moratorium on customs duties on e-commerce. Agtech was an area where the WTO would need to break its work in “silos” to allow innovation to proceed at a faster pace.



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# What's in a Chocolate?

## Understanding Cocoa Markets and Trade

Moderated by **Doaa Abdel-Motaal**, Senior Counsellor, WTO Agriculture and Commodities Division

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### THE TEAM

**Nicko Debenham**, *Managing Director, Sustainability Solutions, and former Head of Sustainability at Barry Callebaut*

**Ambassador Jose Valencia**, *Permanent Representative of Ecuador to the World Trade Organization (WTO)*

**Wendy Gloria Musiimenta**, *Founder of Nile Chocolates, Uganda*

**Michele Nardella**, *Director of the Economics, Statistics, and Sustainable Development Division, International Cocoa Organization (ICCO)*

**Edwini Kessie**, *Director, Agriculture and Commodities Division World Trade Organization (WTO)*

### Big Takeways, A Very Quick Read

This webinar was designed to explore cocoa market dynamics and the current crisis facing the cocoa industry.

- Few products captivate consumers worldwide like chocolate, yet behind every bar lies a deeply complex global supply chain. Cocoa is the backbone of a \$50 billion industry, shaped by shifting trade policies, sustainability concerns, and evolving market dynamics. This high-level dialogue shed light on the challenges and opportunities in cocoa trade, particularly the ongoing crisis caused by supply shortages in West Africa and the rise of new market players like Ecuador.
- The discussion revealed that the current crisis in cocoa markets is primarily due to a severe supply shortage driven by poor harvests in Côte d'Ivoire and Ghana. These top producers—responsible for over 60 percent of global cocoa supply—have been hit hard by adverse weather conditions, widespread crop diseases, structural farming challenges, and galamsey, the illegal small-scale mining in Ghana that has led to deforestation and reduced cocoa yields.
- As Ghana struggles, Ecuador is emerging as a key player in the global cocoa market. The country is set to become the world's second-largest cocoa exporter, surpassing Ghana. Ecuador's focus on sustainability, quality improvement, and value-added processing is positioning it as a formidable competitor in the industry.
- The cocoa industry is shaped not just by weather and farming conditions but also by trade policies and regulations. Import tariffs, price stabilization mechanisms, and sustainability regulations all impact global cocoa flows. A key issue raised in the discussion was 'tariff escalation', a trade phenomenon in which import duties increase as products become more processed. While raw cocoa beans often enter markets with low or zero tariffs, processed cocoa products such as cocoa butter, powder, and chocolate face significantly higher tariffs. Despite preferential trade agreements, tariff escalation remains a major barrier that prevents cocoa-exporting countries from moving up the value chain, limiting their ability to develop local processing industries and retain more economic benefits from their cocoa production.



- Investment in local processing is therefore a crucial issue. Despite producing most of the world's cocoa, Africa processes very little of it. An enabling trade and investment environment, and the expansion local processing capabilities, would increase economic returns for cocoa-producing nations, reduce reliance on raw bean exports, and strengthen resilience against market fluctuations.
- The European Union, as the world's largest cocoa buyer, is also implementing strict environmental regulations, particularly those aimed at preventing deforestation-linked imports. These policies are likely to reshape the cocoa sector in Africa and beyond, forcing producers to meet new sustainability standards or risk market exclusion.
- While the worst of the supply crisis may be easing, structural shifts in the market are here to stay. The industry's future hinges on sustainable farming, investment in processing, and trade policies that balance the needs of producers, traders, and consumers. This dialogue provided an insightful look into the forces driving the cocoa trade and what the future holds for chocolate lovers worldwide.



[Watch here](#)

# Trade and Food Security, Insights from the Frontlines of Global Agriculture

Moderated by **Doaa Abdel-Motaal**, Senior Counsellor, WTO Agriculture and Commodities Division

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## THE TEAM

**Wandile Sihlobo**, *Chief Economist, Agricultural Business Chamber of South Africa (Agbiz)*

**Joe Glauber**, *Senior Research Fellow, International Food Policy Research Institute (IFPRI)*

**Sara Roversi**, *President, Future Food Institute*

**Edwini Kessie**, *Director, Agriculture and Commodities Division World Trade Organization (WTO)*

**Maximo Torero**, *Chief Economist, Food and Agriculture Organization (FAO) of the United Nations*

## Big Takeways, A Very Quick Read

This edition of the Trade Dialogues on Food explored the evolving relationship between international trade and food security in a world shaped by geopolitical tension, climate volatility, and economic uncertainty. While the global supply of key staples currently appears stable, the international food market remains exposed to risks – making trade more central than ever to addressing global hunger.

- International trade has become indispensable to food security, with 20% of global calorie consumption crossing at least one international border. One in every six people around the world depends on international trade for food. In today's interconnected world, food production, processing, and distribution span multiple countries – making global cooperation and rule-based trade critical.
- Maximo Torero of the FAO emphasized that the food security picture is most alarming in Africa, the continent with the largest percentage of undernourished people. In contrast, Latin America is largely on track to meet SDG2 (zero hunger) by 2030. He called for greater global attention to the African context.
- Speakers converged on one key point: during recent crises – including COVID-19 and the war in Ukraine – the global trading system provided countries with the flexibility to diversify both their import sources and export markets, helping avoid more severe food insecurity. However, Joe Glauber (IFPRI) cautioned that diversification carries a cost – building new trade relationships requires time and investment. He urged governments to focus on preserving and strengthening current supply chains. Glauber offered the example of Brazil, which successfully diversified its fertilizer sources when pandemic-related restrictions struck.
- Wandile Sihlobo described the challenges facing Africa, arguing that unless agricultural productivity is boosted, the African Continental Free Trade Agreement (AfCFTA) will not deliver broad benefits. He pointed to key policy actions: increasing fertilizer use and improving seed access across the continent. Otherwise, he warned, only a few countries would benefit from liberalized trade.
- Boubaker Ben-Belhassen (FAO) spoke of the importance of integrating trade into national food security strategies, while also calling for better early warning systems and market intelligence tools. He encouraged all actors to actively engage in WTO reform discussions, which are essential to modernize global food trade governance.



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- Sara Roversi (Future Food Institute) emphasized that the tools already exist to create a stronger and more resilient food system, but that what is missing is political will. Without action, the risk is that food systems will continue to underperform despite the solutions being within reach.
- Edwini Kessie of the WTO highlighted the Organization's role in keeping food flowing across borders fairly and predictably. He underlined that during recent global shocks, it was WTO rules that created the bridge of trust between nations. Kessie pointed to WTO initiatives, such as the Ministerial Declaration on Food Security. He stressed the importance of transparency, of updating agricultural trade rules, of enhancing food safety capacity through programs like the STDF, and of guarding against "food nationalism" in the form of export restrictions.
- This Dialogue reinforced the idea that trade is not the enemy of food security – uncoordinated restrictions are. Modernizing the global trading system, investing in agricultural transformation, and ensuring open and transparent markets will be key to meeting the food security challenges of the future.



[Watch here](#)

# Trade 2.0: Apps, Digital Labels and the Next Frontier in Food Information

Moderated by **Doaa Abdel-Motaal**, Senior Counsellor, WTO Agriculture and Commodities Division

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## THE TEAM

**Anne Célia Disdier**, *Professor, Paris School of Economics*

**Pierre Slamich**, *Co-Founder, Open Food Facts*

**Helen Medina**, *CEO, World Spirits Alliance*

**Juan Marchetti**, *Director, Trade in Services and Investment Division, WTO*

**Ludovica Verzeznassi**, *Global Head of Regulatory and Scientific Affairs, Nestlé S.A.*

**Hoe Lim**, *Director, Trade and Environment Division, WTO*

## Big Takeways, A Very Quick Read

This webinar was designed to explore how digitalisation is transforming the way consumers receive food information – and what this means for trade, regulation, and innovation.

The discussion revealed three overarching themes: fast-moving innovation, uneven regulatory trajectories, and a growing need for international cooperation to prevent fragmentation in global food markets.

### 1. Convergence in goals, divergence in methods

- Across jurisdictions, governments increasingly share the same objectives – better consumer information, greater transparency, and healthier diets. Yet, as Anne-Célia Disdier explained, policy tools are diverging, shaped by different priorities and levels of digital capacity. This divergence risks creating new non-tariff barriers and higher compliance costs for exporters, particularly smaller producers and developing-country suppliers. Digitalisation can lower trade costs if supported by common standards, but without coordination it may add new layers of regulatory heterogeneity.

### 2. Digital labels and QR codes: real opportunities, real risks

- Industry and regulators see clear advantages in QR codes and online product pages:
  - they allow richer information when physical label space is limited;
  - they can support traceability and sustainability demands;
  - they respond to consumers' growing expectations for immediacy and detail.
- Ludovica Verzeznassi underscored that digital labels can only succeed where digital infrastructure exists, and that international standards, such as Codex standards, remain essential to prevent proliferation of incompatible national systems.
- At the same time, panelists stressed major risks:



- Pierre Slamich warned that fully digital systems may tilt power toward producers, who could track consumers, restrict access, or curate information.
- Technical issues (poor connectivity, dead links, variable formats) could reduce real-world accessibility, particularly for vulnerable consumers.
- Front-of-pack labels remain a low-cost, high-impact public-health tool, and cannot be replaced by digital tools alone.

### 3. Apps are new global services – and raise new regulatory questions

- Platforms like Open Food Facts and Yuka now operate as de facto cross-border digital services. As Juan Marchetti noted, GATS disciplines – including market access, national treatment and transparency – may already apply, depending on the nature of the service, the supplier, and the mode of service delivery.
- New rules on Services Domestic Regulation are also relevant to food apps. This places these apps directly in the evolving landscape of digital-trade rules, data-flows discussions, and the JSI on e-commerce. Clearer regulatory frameworks could help ensure these services remain predictable and transparent.

### 4. WTO disciplines already provide anchor points

- Hoe Lim highlighted that existing WTO agreements – SPS for food safety, TBT for food quality and information – are equipped to address many emerging issues. Certain key WTO principles are highly relevant to digitalisation: regulations must not be more trade-restrictive than necessary; interoperability and reliance on international standards should remain central; and WTO Committees must continue to act as a fora for dialogue. The WTO TBT Committee is already a forum where Members raise labelling-related concerns and manage tensions between consumer protection and market openness.

### 5. What consumers demand is evolving – and complex

- Speakers and viewers alike emphasized a growing interest in nutrition, ingredients, additives, and allergens; rising expectations around sustainability, carbon footprints, and ethical production; and concerns about misleading information, algorithmic recommendations, and apps suggesting substitute products. This underlines the need for trustworthy, accessible, and non-discriminatory information systems, whether digital or physical.

### 6. Collaboration will determine whether Trade 2.0 is an enabler or a barrier

- All panelists converged on one message: Without cooperation on data standards, interoperability, and transparency, digitalisation could fragment markets as quickly as it connects them. But with the right frameworks, digital tools can improve consumer welfare, reduce trade friction, and enhance global transparency.



[Watch here](#)

# Food Safety, Plastics and Other Contaminants in our Food

Moderated by **Doaa Abdel-Motaal**, Senior Counsellor, WTO Agriculture and Commodities Division

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## THE TEAM

**Felix Cornehl**, *Plastic Policy Lead, Systemiq*

**Ludovica Verzegnassi**, *Global Head of Regulatory Affairs, Nestlé*

**Kay Sealy**, *Deputy Permanent Representative of Barbados to the WTO*

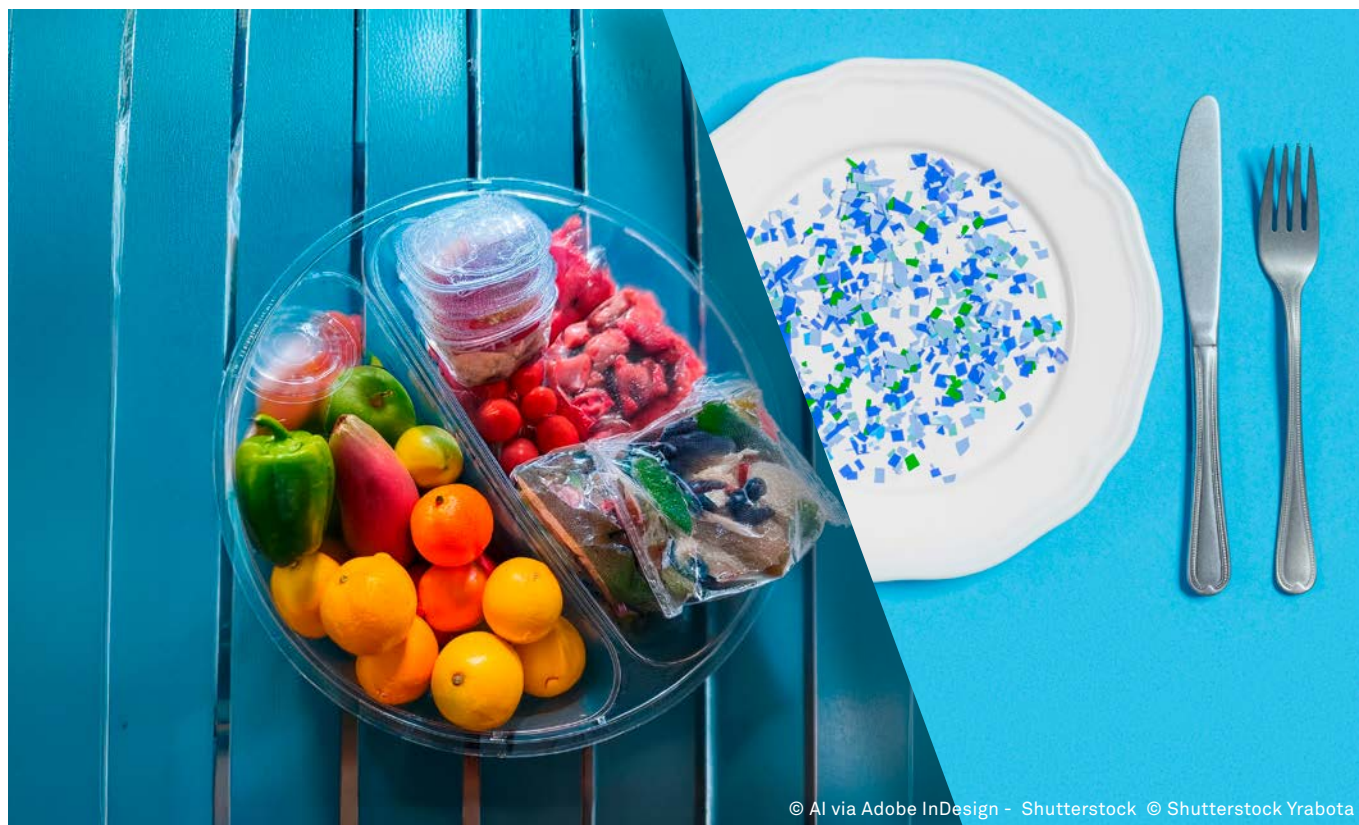
**Sally Hoffer**, *Chair, Codex Committee on Contaminants in Food*

**Edwini Kessie**, *Director, Agriculture and Commodities Division, WTO*

## Big Takeways, A Very Quick Read

This webinar was designed to address plastic contamination of food, and the interaction between plastics regulations and international trade. The recent 2025 report by Systemiq entitled '[Invisible Ingredients in our Food](#)' acted as the backdrop for discussion.

- Systemiq explained that up to 16,000 chemicals are used in plastics, with 3,000 of them known to migrate. For many of these chemicals there is little to no hazard data, and substances are generally treated as innocent until proven harmful. These chemicals create exposure throughout their full life cycle, with 'food contact material' in the food sector being the most significant exposure pathway. Food contact material consists mostly of packaging but can include contact in the food production and processing phases. PFAS – which are forever chemicals, are particular complex since they are now detectable globally.
- Nestle highlighted a critical industry constraint in the transition away from plastics. While companies are actively reducing the use of plastics in food contact materials, the pressure to do so is often outpacing the availability of safe and scalable alternatives. Plastics continue to play a central role in preserving food safety, shelf life, and supply chain integrity, and current substitutes — such as paper-based materials – are not yet able to match their barrier performance.
- This is particularly evident in hot climates and long-distance supply chains, where poor oxygen and moisture barriers can compromise food quality and increase waste. At the same time, regulatory requirements for mandatory recycled plastic content are adding complexity, as food-grade recycled plastics require stringent approvals. The transition therefore presents a risk of unintended consequences for food safety unless it is grounded in science and supported by the development of viable alternatives at scale.
- The WTO Dialogue on Plastics Pollution (DPP) was presented. Launched in 2020 by 14 members, the initiative has expanded to 83 co-sponsors and is open to all WTO members, reflecting broad engagement across the system. Its objective is to identify practical opportunities to support the transition toward a more circular and resource-efficient global plastics economy.
- A distinctive feature of the DPP is its inclusive, multi-stakeholder approach, bringing together not only trade officials but also business, international organizations such as UNEP and UNCTAD, as well as civil society and academia.



- In so doing, it has become a flexible model of engagement in WTO for addressing 21st century challenges. At the WTO 14<sup>th</sup> Ministerial Conference in Yaoundé the DPP produced five outcome documents whose overall ambition is to monitor plastics trade flows; examine the design of trade-related plastics measures; minimize single use plastics; expand the goods, services and technologies for plastics waste management; and scale up environmentally-sound non-plastic substitutes. The DPP has shown that eliminating harmful plastics is not a straightforward substitution exercise. Encouragingly, HS 2028 will now include new sub-headings for single use plastics.
- The Chair of the Codex Committee on Contaminants explained how contaminants are defined: “any substance not intentionally added to food or feed.” This can include a broad range of chemicals ranging from metals all the way to organic pollutants. The definition covers man-made and naturally occurring chemicals. So far 25 Codes of Practice covering various contaminants have been produced, and 150 Maximum Levels set for 19 contaminants or groups of contaminants. The goal is to arrive at the “lowest achievable concentration”, with that balance being key to allow markets and the economy to function. Limited funding for scientific expert groups however are now a serious concern for the work of Codex.
- The WTO Agriculture and Commodities Division explained that plastics and chemical contaminants are no longer marginal issues in trade, but are increasingly surfacing in both SPS and TBT Committees as Specific Trade Concerns. Measures on plastics - particularly food contact materials - are proliferating across countries, often with divergent approaches to risk assessment, thresholds, and compliance requirements. This is creating growing friction in global supply chains, especially for developing country exporters. At its core, the challenge reflects a deeper structural tension: how to manage scientific uncertainty, regulatory diversity, and rapid policy change while maintaining transparency, proportionality, and the smooth functioning of international trade.



[Watch here](#)

# Global Food and Fertilizer Outlook

Moderated by **Doaa Abdel-Motaal**, Senior Counsellor, WTO Agriculture and Commodities Division

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## THE TEAM

**Justin Benavidez**, Chief Economist, United States Department of Agriculture (USDA)

**Alzbeta Klein**, Board Director and CEO, International Fertilizer Association (IFA)

**David Laborde**, Director of the Agrifood Economics Division, Food and Agriculture Organization (FAO) of the United Nations

**Brian Arnold**, President, Grain and Feed Trade Association (GAFTA)

**Edwini Kessie**, Director, Agriculture and Commodities Division, World Trade Organization (WTO)

## Big Takeways, A Very Quick Read

This webinar was designed to assess the global food and fertilizer outlook against the backdrop of disruption to the Strait of Hormuz. It also reflected on five years of Trade Dialogues on Food and the themes of interdependence, fragility and the role of trade that have run through them.

- The Strait of Hormuz disruption has become a major inflection point for fertilizer markets. Alzbeta Klein (IFA) reported that urea prices have roughly doubled since the closure began and phosphate markets are tightening further due to limited alternative suppliers. Fertilizer application rates of nitrogen are expected to fall by 1–2%, with phosphate seeing steeper declines — both of which will translate into reduced future food supply.
- The fertilizer sector faces structural concentration risks that limit its resilience. Klein explained that two-thirds of key fertilizer inputs are mined minerals, making meaningful diversification inherently difficult. While some regional buffer exists — not all continents plant simultaneously, and new trade routes out of the Middle East are being explored — these factors are insufficient to offset the scale of the current disruption.
- Unlike in 2022, food commodity prices have so far remained relatively stable — but this window may be closing. David Laborde (FAO) stressed that the world is fortunate to be starting from a position of historically strong harvests. However, the real impact on food prices and food security in low-income countries is expected to materialize approximately six months from now, driven not by food shortage but by deteriorating affordability as energy and transport costs rise.
- USDA data confirmed a tightening of key commodity markets for 2026. Justin Benavidez (USDA) presented the May 2026 USDA Outlook for US Agricultural Trade, which forecasts total US agricultural exports at \$176.5 billion — a modest increase on the prior year, masking significant divergence across commodities (a rise in exports in some — like corn, but a fall in others — like wheat with the US suffering its most important drought since 2012).
- Biofuel mandates are adding a further layer of pressure. Both Benavidez and Edwini Kessie (WTO) noted that expanding biofuel blending mandates in several countries are creating additional demand pressure on oilseeds, further straining agricultural markets already under stress from the energy shock and competing with food production for limited resources.
- Grain traders are navigating multiple, simultaneous layers of risk. Brian Arnold (GAFTA) identified three distinct risk categories: the fragility of supply corridors (Russia and Ukraine together supply a dominant share of internationally traded wheat); physical disruption risks including rising fuel, insurance and voyage costs; and the deepening interlinkages of globalized supply chains that can



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amplify rather than absorb shocks. Arnold noted that the mere announcement of the Black Sea Grain Initiative had a stabilizing effect on markets — a reminder of how much markets depend on predictability and clear communication.

- Fertilizers are increasingly being treated as strategic commodities, with serious implications for market transparency and reliability. Klein warned that calls for strategic fertilizer reserves — now being heard in major trading blocks — represent classic strategic-commodity behaviour. Once open trade flows are replaced by state interventions and reserve-building, market reliability declines and a single global market fragments into a patchwork of managed national markets driven by geopolitics rather than fundamentals.
- Farmers face acute and compounding decision pressures. Kessie (WTO) explained that the fertilizer shock is now forcing farmers to choose between reducing planted area or reducing fertilizer application — either of which will constrain future yields. Early surveys suggest many farmers cannot afford all the fertilizers they need for the 2026 planting season.
- Export restrictions remain a major risk to market stability and are counterproductive at precisely the moment they are most tempting. Arnold stressed that such measures — applied to rice, palm oil and other commodities in past crises — pull supply from markets at the moment of greatest need, compounding damage rather than containing it. Laborde underlined that “me first” policy responses are costly for all, and that trade policy must be evidence-based. Arnold called on governments to commit to free trade, strengthen data and notification systems, and communicate policy intentions to trading partners with advance warning. As Arnold observed: “uncertainty has a price — and someone else pays it.”
- The WTO Committee on Agriculture is proving its value as a forum for transparency and managed tension. Kessie reported that the recent Committee on Agriculture review saw members actively engaging on export restrictions, domestic support programs, tariff quota administration and commodity-specific support. The Committee is functioning as both a release valve and an information-sharing mechanism. Members are asking tough questions, and the process forces governments to articulate and defend their reasoning — a healthy discipline. Kessie cautioned, however, that reversing protectionist measures once in place can take years or even decades, making prevention far more important than cure.
- The session’s closing exchange on lessons from past crises produced a convergent message: efficiency and resilience are not the same thing. Benavidez observed that the food system’s “just-in-time” model has been exposed as a structural vulnerability. Klein explained that resilience sometimes requires accepting inefficiency, and that resilience and efficiency are not the same thing. Arnold pointed to growing interconnectivity as both the system’s greatest strength and its greatest challenge. Laborde argued that the food system has proved resilient precisely because of international trade — the ability to diversify suppliers has buffered multiple crises — and that this should be a cause for confidence, not complacency. Kessie added that the WTO needs to complete its agriculture negotiations to give the system stronger rules-based foundations for the future.



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