



International Trade: Sustainability and Food Security for the Future

Summary

- Rules-based international trade plays a critical role in ensuring food security for people around the world, reducing vulnerability to shocks and mitigating risk of food shortages in times of crisis.
- Sustainable global food systems depend upon rules-based international trade that promotes resilient supply chains, environmental conservation, strong livelihoods for producers, and affordable healthy foods for consumers
- Efficient production practices should be encouraged and have significant environmental benefits, regardless of whether food is locally produced or traded across borders.

Trade benefits sustainable food systems

Producing enough healthy, affordable food in the face of challenges like population growth, urbanization, conflict and climate change requires resilient and sustainable food systems that can safeguard global food security in times of calm and crisis.

International trade is essential to building sustainable food systems that deliver food and nutrition security for all without compromising the economic, social and environmental well-being of future generations.¹ Sustainable food systems support farmers' liveli-

hoods, provide benefits for society, and have a positive or neutral impact on the environment.

International trade can allow for food produced where practices are most efficient to be made available where it is needed, optimizing environmental footprint, combating climate change and making foods more affordable. Further, as demonstrated by the COVID-19 pandemic, countries must think globally and act together to strengthen diverse, resilient supply chains that can adapt to crises.

Meeting the challenges of climate change

Climate change is already impacting where and how food is grown today and poses profound risks for food security in the future. International trade must play a central role in mitigating these risks, supporting food production in the most well-suited climates with environmentally responsible practices that provide healthy, safe and affordable foods for diverse dietary patterns.

Climate varies by geography, and this variation means that some areas and regions are better suited than others to produce certain crops or support livestock. International trade allows global consumers, including those most in need, to access foods grown in areas where regional differences in climate and natural resources support sustainable production practices, helping our food systems adapt to the impacts of climate change. Without a robust international trading system, there is a greater risk that local changes in production due to a number of unforeseen circumstances, as well as climate change, will escalate into food crises. For this reason, international trade is increasingly being regarded as a potential adaptation mechanism in response to climate change.

A 2020 study published in the journal *Nature Climate Change* found that restricting trade would worsen the impacts of climate change on hunger, increasing the prevalence of undernourished people by up to 47%. In contrast, the study found that reducing trade barriers would partially alleviate climate change's impact on hunger, decreasing climate-related undernourishment by up to 64%. The study concludes, "International trade can substantially contribute to climate

change adaptation by reducing global hunger driven by the heightened pressure of climate change on agricultural markets."²

Some argue that because trade increases "food miles" it is harmful to the environment. Data show, however, that food transport is a small contributor to greenhouse gas emissions. For most food products, it accounts for less than 10% of total emissions.³ Focusing on 'food miles' obscures the multitude of factors that can impact a product's carbon footprint such as land use, production practices and storage, and conceals the true value of international trade in sustainable food systems and healthy diets. In fact, only about 400 million people worldwide live in an area where their existing diets could be sustained by local production (within 100 square kilometers).⁴

Transport accounts for 5 to 10% of total emissions in the production of dairy foods, putting them at or below the average emissions associated with the transport of other foods. With some parts of the world being far more efficient in producing dairy products, there is clearly a role for international trade in dairy to help reduce environmental footprint. U.S. dairy farm emissions, for example, average slightly more than 1 kilogram of carbon per kilogram of milk produced, whereas in low- and middle-income countries (LMICs), dairy farm emissions can be as much as 20 times higher.⁵ Here, international trade offers an option to provide access for consumers in certain LMICs to nutritious dairy products without bringing more land under grazing or expanding existing herds and subsequently increasing environmental impact.



Resilient food supply chains

Climate change is not the only challenge we must overcome in building a sustainable food system. The COVID-19 pandemic, conflict and civil unrest has starkly illustrated how disruptions in supply and demand can tangle supply chains, leading to food shortages, price increases and devastating health consequences for communities around the globe.

Disruptions to supply chains during the pandemic dramatically increased food insecurity after a period of stability for the preceding five years. According to the Food and Agriculture Organization of the United Nations (FAO), the prevalence of undernourishment increased to 9.9 percent in 2020, from 8.4 percent a year earlier, resulting in 118 million more people facing hunger in 2020 than in 2019.⁶

The OECD's June 2020 policy paper on COVID-19 and international trade emphasized that "Internationally, diversified production is often a source of resilience and adjustment for firms in an adverse environment, while experience in the agrifood sector has shown that self-sufficiency of supply is not the same as security of supply." The paper particularly warns against export controls and concludes that "...trade is essential to save lives and livelihoods."⁷ Russia's invasion of Ukraine has further exacerbated concerns about food security, and FAO Director-General Qu Dongyu has argued strongly that global food trade must remain open to "...protect the production and marketing activities needed to meet domestic and global demands."⁸

Conclusion

Food supplies are under greater strain from climate change, a growing population, and unexpected crises. Rules-based international trade is one of many solutions that is needed to deliver sustainable, healthy and affordable diets to global communities while protecting the planet, both now and into the future.

References

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