THE ROLE OF INTERNATIONAL TRADE IN PROMOTING FOOD SECURITY

Joaquín Arias¹, Marcos S.Jank, Victor M.Cardoso, Víctor Umaña, Leandro Gilio

(September 2024)



1 Joaquín Arias and Víctor Umaña are, respectively, the coordinator of the Observatory of Public Policies for AgriFood Systems (OPSa) and a consultant for IICA. Marcos S. Jank, Leandro Gilio, and Victor M. Cardoso are, respectively, a senior professor at Insper and coordinator of Insper Agro Global, a researcher and professor at Insper Agro Global, and a researcher at Insper Agro Global. Contributions from Eugenio Diaz-Bonilla, Karla Vega, Milagros Conislla, and Eugenia Salazar from IICA, and Marcos Abdalla from Insper, are appreciated.

INTRODUCTION

In the current global landscape, characterized by growing climatic, geopolitical, and economic challenges, food trade emerges as a fundamental element in addressing the four pillars of food security: availability, access, utilization, and stability. This article examines the interaction between international trade and global food security, with the aim of informing and guiding the formulation of effective policies in this critical area.

First, the current state of global food security is presented, identifying the key factors that contribute to its vulnerability. Subsequently, global patterns of food trade are explored, highlighting how international trade dynamics influence food security in various regions. In this context, Latin America plays a crucial role as a key player in promoting global food security, both for its productive capacity and its contribution to price stability and the diversification of food supply. This exploration lays the groundwork for an informed discussion on the strategic role of trade in mitigating global food challenges.

To address these challenges, a set of policy recommendations is offered, structured at three levels: multilateral agreements, national trade policies, and macroeconomic and sectoral strategies. These recommendations seek to provide a comprehensive framework for designing evidence-based policies that effectively leverage international trade as a tool to strengthen global food security. With a clear and strategic vision, this document aspires to be a practical guide for policymakers, providing them with the necessary tools to face current and future challenges in promoting food security through international trade. This document was prepared in the context of the G20 Agriculture Working Group, presented during the plenary session of the 3rd meeting of the group in Brasília on June 11, 2024, with the aim of contributing to the discussions and strategic decisions of the G20 agricultural leaders.

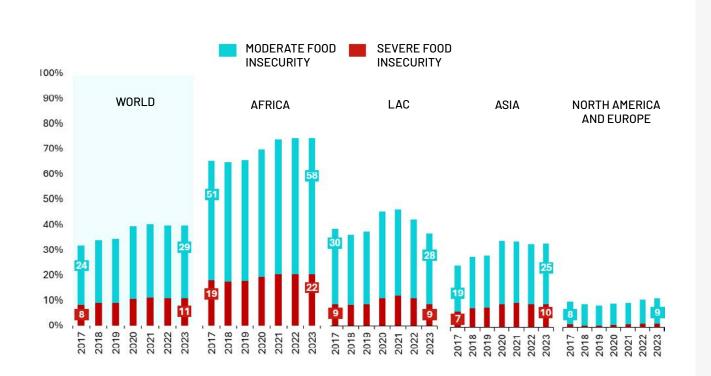
Food and nutritional security in the world

Global food and nutritional security has faced significant challenges since 2014, with an increase in food insecurity across all regions and marked inequalities in access to sufficient and nutritious food. Africa presents the most critical situation, while North America and Europe show the lowest rates of food insecurity (Figure 1).

Malnutrition, defined by the FAO as the insufficiency of energy intake (calories) without considering the quality or diversity of the diet and often used interchangeably with the term "hunger," has also worsened and varies significantly between and within regions (Figure 2). In Africa, especially in the sub-Saharan region, the highest rates are observed, with some areas exceeding 45% of the population being malnourished. Asia presents a heterogeneous situation, with countries like China and Japan showing

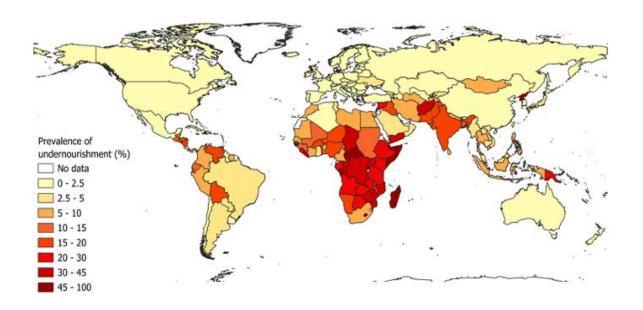
low rates, while India and Pakistan face considerable challenges. Latin America and the Caribbean also show diversity, with countries like Mexico and Argentina having low incidences of malnutrition, in contrast to Haiti and Venezuela.

FIGURE 1. **PREVALENCE OF FOOD INSECURITY IN THE POPULATION BY REGION (2017-2023)**



Source: The authors based on FAOSTAT

FIGURE 2. **PREVALENCE OF UNDERNOURISHMENT (%)**

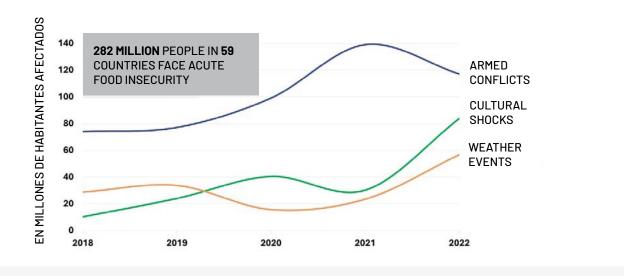


Source: The authors based on FAOSTAT, 2024

Factors that determine global food insecurity

Global food insecurity is influenced by several interconnected factors, primarily political instability, economic crises, and extreme weather events. In recent years, these factors have intensified their impact, worsening the situation in many regions of the world (Figure 3).

FIGURE 3. DIMENSION OF INFLUENCING FACTORS PER NUMBER OF PEOPLE AFFECTED BY THE FOOD CRISIS (IN MILLIONS OF PEOPLE, FROM 2018 TO 2024).



Source: The authors, based on data from the Global Report on Food Crises 2023 and HLPE, 2024.

Armed conflicts have had devastating consequences for food security. Since 2018, the number of people affected has increased, reaching its highest point in 2021. For example, conflicts in Ukraine and the Middle East have caused massive displacements and destroyed essential infrastructure, disrupting food production and distribution.

Economic crises, especially since the COVID-19 pandemic in 2020, have exacerbated the problem. Global inflation has increased the costs of food production and transportation. The rise in prices of agricultural inputs such as fertilizers and fuels has reduced farmers' capacity to maintain their production. Moreover, job losses and rising food prices have worsened the situation in many areas. Simultaneously, extreme weather events like droughts, floods, and hurricanes have severely impacted agricultural production since 2020, destroying crops and infrastructure and increasing the vulnerability of affected communities.

Income is another crucial factor for food security. Higher incomes allow families to access a more varied and nutritious diet, as well as provide economic stability and resilience. Farmers with more resources can invest in sustainable technologies and practices, improving their productivity. The relationship between income and malnutrition is clear: the higher the per capita income, the lower the malnutrition.

An analysis of 166 countries reveals how an increase in per capita income is strongly correlated with a decrease in the prevalence of malnutrition. In the first income decile (from a sample of 166 countries), with a per capita income of approximately USD 907, the prevalence of malnutrition is 30.5%. As income increases, this figure drops dramatically. For example, in the fifth income decile, with a per capita income of \$5,988, the prevalence of malnutrition decreases to 6.25%. This relationship highlights the importance of policies that promote inclusive economic growth and increased income to improve food security and reduce malnutrition.

On the other hand, food inflation particularly affects vulnerable populations, who spend a larger proportion of their income on food. As shown in Figure 4, global general and food inflation indices have experienced significant increases, with the food inflation index reaching 209.56 in April 2024, compared to the general inflation index, which reached 176.7. The food crises of 2007/2008 and 2011 demonstrate how price fluctuations can trigger social and economic crises. The persistence of domestic food inflation, even when international prices drop, underscores the need to address these structural challenges to improve food security and protect the most vulnerable populations.

Access to healthy diets varies greatly between regions. In Sub-Saharan Africa and South Asia, a healthy diet costs more than 70% of the average daily income, while in Europe and North America, this figure is only 3.5% to 10.6%. This is directly reflected in the access to healthy food. The situation is particularly severe in Africa (80% of the population) and Asia (43%), while in Latin America and the Caribbean, it affects 22% of the population. In contrast, only 2% of the population in North America and Europe faces this problem.

FIGURE 4.

GLOBAL INDICES OF GENERAL AND FOOD INFLATION, AND INTERNATIONAL FOOD PRICE INDEX (2015=100, FROM JAN. 2005 TO APR. 2024).²



Source: OPSAa (IICA) based on data from FAO and IMF.

² Note: Inflation data as of September 2023.

This situation requires coordinated global strategies to improve food security. Policies should focus on reducing poverty, increasing resilience to extreme events, and making healthy diets more accessible. International cooperation is essential for sharing knowledge and resources.

In this context, international trade can play a key role by facilitating access to diverse foods, stabilizing prices, and improving availability in regions with limited production.

Role of trade in promoting food and nutritional security

The key role of international trade is evident in its ability to connect national agri-food systems, move food from regions with surpluses to regions with deficits, facilitate the formation of a sustainable global agri-food system, and generate beneficial distributive effects. These main roles of international markets are realized through seven fundamental functions that help build a more sustainable and equitable agrifood system, addressing the four dimensions of food security: availability, access, utilization, and stability (Rodriguez, D. et al., 2021; FAO et al., 2023).

Firstly, the redistribution of food production allows products to flow from regions with surpluses to those with deficits, ensuring greater availability and quality of food. This redistribution is essential for mitigating negative shocks, such as those caused by climate or diseases, and ensuring that everyone has access to sufficient food. Additionally, improvements in transportation and distribution infrastructure facilitated by international trade enable food to reach remote and less developed areas. Through this function, food **availability** and **stability** are strengthened, ensuring a constant and reliable supply globally.

International trade also increases the diversity of food options available to consumers. By expanding the variety of foods in markets, it promotes diet diversification, which is crucial for balanced nutrition and overall health. This function enhances access to a wide range of foods and supports better nutrient **utilization**, encouraging more varied and nutritious diets.

Additionally, trade helps stabilize food prices. By enabling the movement of products between different markets, it makes prices more affordable, especially for vulnerable populations. The ability to import food from various countries reduces vulnerability to local crises, such as natural disasters or conflicts. This also lessens the impact of temporary shocks on food supply and demand, offsetting fluctuations in domestic production caused by factors like weather, pests, or diseases. Integration into international trade provides a vital safety net during emergencies, helping maintain a stable food supply, favoring price **stability**, and improving affordable **access** to food.

One of the most significant contributions of international trade is its role in combating hunger and malnutrition. By improving food availability and generating employment and income opportunities, trade has a direct effect on people's health and well-being. Participation in international trade generates additional employment and income, increasing people's purchasing power and their ability to buy food. This not only improves access to nutritious foods but also promotes their proper **utilization**, ensuring that people can fully benefit from the food they consume. Improving food safety and health standards is another key function of international trade. Through regulated systems, it ensures that internationally traded foods meet strict safety standards, thus protecting consumer health. Additionally, importing safe and high-quality foods can enhance the quality of the population's diet and promote higher standards of sanitation and food safety. This improves food **utilization**, ensuring that consumed products are safe and nutritious, and strengthens **access** to quality foods.

International trade also boosts agricultural productivity. By facilitating the transfer of knowledge and technologies related to nutrition and food safety, including best agricultural practices, food processing techniques, and nutritional knowledge, it increases the efficiency of farmers and actors in the value chains. This improves their incomes and contributes to the sustainability of the agricultural sector. It enhances food **availability** through increased production and strengthens food supply **stability** by disseminating sustainable technologies and practices.

Finally, trade enables efficient resource allocation. This means that food production can occur in the most productive and sustainable regions, mitigating supply disruptions due to climatic factors and improving the resilience of agri-food systems. This function increases global food **availability** and ensures supply **stability** while promoting more sustainable and efficient production.

In summary, international trade connects global food systems, redistributes food to improve its quantity and quality, and mitigates the effects of climate shocks and diseases. It also fosters a sustainable food system, generates economic and social benefits, disseminates agricultural technologies, and enhances production efficiency. Collectively, these actions reinforce food and nutritional security, highlighting the importance of trade in creating a safer and healthier world.

Structure and trends of international food markets

The global agri-food trade landscape has undergone significant transformations over the past two decades, revealing a new geography of agri-food trade balances. This evolution is characterized by the emergence of regions with pronounced imbalances, reshaping international trade flows of agri-food products.

Latin America has established itself as the region with the largest agrifood trade surplus globally, a trend that has notably intensified since the beginning of the 2020s, with the regional surplus surpassing \$170 billion annually. In contrast, East Asia, including China, has experienced a substantial increase in its agricultural trade deficit, reaching levels exceeding \$200 billion annually (figure 5).

FIGURE 5. REGIONAL AGRICULTURAL TRADE BALANCE (BILLION USD, CURRENT VALUES)

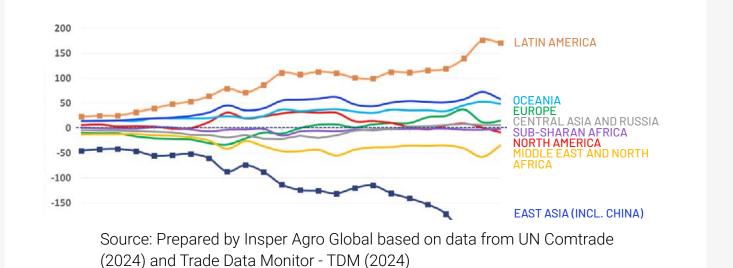
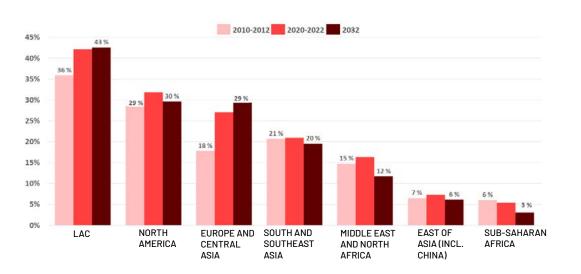


FIGURE 6. ACTUAL AND PROJECTED SHARES OF AGRICULTURAL EXPORTS BY REGION (BY CALORIC PRODUCTION VALUE, 2010-2032)



Source: Prepared by Insper Agro Global based on data from OECD-FAO Agricultural Outlook 2023.

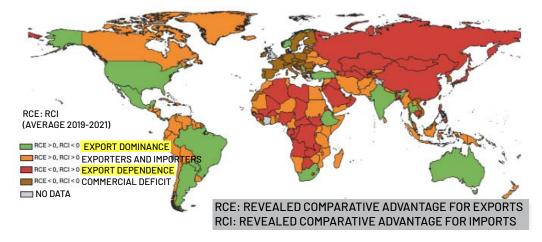
Analysis of net per capita food import flows reveals distinctive global patterns. Regions with surpluses, primarily in South America, North America, and Oceania, contrast sharply with deficit areas, which are largely concentrated in Africa, the Middle East, and some parts of Asia. There is a clear differentiation between nations with "export dominance" that enjoy a strong comparative advantage in agricultural exports and those categorized as "dependent," which rely significantly on imports to meet their food needs (figure 7).

Food import dependence varies considerably between regions. While the Middle East and North Africa region (MENA) experiences high and increasing dependence, projected at 71% by 2032, Latin America and the Caribbean (LAC) maintains a relatively favorable situation, with a moderate increase in dependence from 20% to 22% between 2020-22 and 2032. In contrast, LAC stands out significantly in the global agricultural export landscape, with a projection to reach 43% of global exports by 2032 (figure 6).

Patterns of consumption for staple foods, meat, dairy, and fish reinforce significant regional disparities, influencing global food trade dynamics. While Africa and parts of Asia show a high dependence on cereals, roots, and tubers in their diets, regions like North America, Europe, and Australia exhibit lower dependence on these carbohydrates and higher consumption of animal protein.

FIGURE 7. DYNAMICS OF INTERNATIONAL TRADE BASED ON REVEALED COMPARATIVE ADVANTAGE

DYNAMICS OF INTERNATIONAL TRADE COMPARATIVE ADVANTAGE TO EXPORT (RCE) OR IMPORT (RCI)



Source: OPSAa (IICA), based on mirror database from Trade Data Monitor (TDM). 3

Coastal regions and island nations tend to exhibit the highest levels of fish consumption, with availabilities exceeding 50 kcal/person/day in many cases. Notably, East and Southeast Asia, parts of Europe, and some coastal areas of Africa and Latin America stand out in this regard.

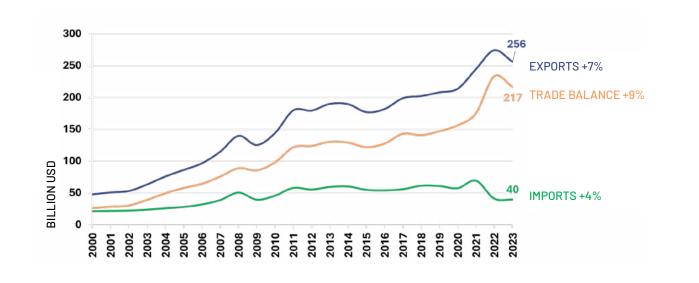
³ Methodology available at https://repositorio.iica.int/handle/11324/7709 and definition of food available at USDA/ERS: https://www.ers.usda.gov/data-products/us-food-imports/documentation/. Explore the data at https://opsaa.iica.int/commerce

The role of Latin America in the promotion of global food security

The Latin America and Caribbean region has established itself as a key player in promoting global food security, standing out not only for its production but also for its contribution to price stability, global food availability, and its research and development capabilities (Díaz-Bonilla et al., 2024). This position hasstrengthenedsincetheearly2000s(figure8), with the region achieving an agricultural trade surplus of \$217 billion in 2023, representing an average annual growth rate of 9%. In 2023, the region's agricultural exports reached \$256 billion, reflecting an average annual growth rate of 8%, while imports remained relatively stable, with a slight annual increase of 3%, reaching \$40 billion. These indicators highlight Latin America's strategic role, not only within the region itself but also as a pillar in the stability and sustainability of global agri-food systems.

FIGURE 8.

LATIN AMERICA: AGRICULTURAL TRADE BALANCE (BILLION USD AND AVERAGE ANNUAL GROWTH RATES)⁴



Source: Prepared by Insper Agro Global based on data from UN Comtrade and TDM (2024).

At the rate at which exports are growing, according to OECD and FAO estimates, Latin America and the Caribbean will represent 19.2%⁵ of global agri-food exports by 2033, an increase of 2.3 percentage points compared

⁴ Note: Only considers extra-bloc exports. The countries that make up Latin America are: Antigua and Barbuda, Argentina, Bahamas, Barbados, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominica, El Salvador, Ecuador, Guatemala, Guyana, Grenada, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Dominican Republic, Saint Kitts and Nevis, Saint Vincent and the Grenadines, Saint Lucia, Suriname, Trinidad and Tobago, Uruguay, and Venezuela.

⁵ As a percentage of the total value of food exported in the world, in U.S. dollars from 2014-16.

to the current share, highlighting its growing importance in the global food landscape. This growth not only reflects the region's productive capacity but also its diversification strategy, which encompasses a wide range of exportable products.

Figure 9 illustrates this diversity, with key products such as grains and oilseeds, as well as tropical fruits, meats, and fish. This variety enriches global nutrition and contributes to price stabilization in international markets. Among this diversity, soybean stands out as the leading export category, with an average annual growth rate of 8.9%, reaching a value close to \$80 billion in 2023. Following this are meat and corn exports, with average annual increases of 9% and 13%, respectively. Products like fruits (+7.6%), fish (+6.2%), sugar (+6.5%), and coffee (+5.7%) also show significant growth. These products not only contribute to the region's economy but also play a crucial role in global food security, ensuring a steady and varied supply of essential foods.

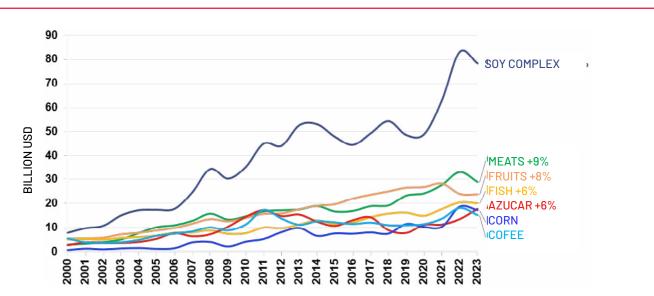


FIGURE 9. LATIN AMERICA: MAIN EXPORTED FOODS

Source: Prepared by Insper Agro Global based on data from UN Comtrade and TDM (2024).

This regional specialization area, as detailed in Table 1, allows different subregions of Latin America to leverage their comparative advantages, contributing to the overall strength of the region's agri-food trade. While the Southern Cone, consisting of countries like Brazil, Argentina, Paraguay, and Uruguay, has become the leading supplier of agricultural **commodities** such as soybeans, corn, wheat, and meats, other subregions have focused their efforts on **specialties** with high added value. These specialties include fresh and processed fruits and vegetables, flowers, nursery products, as well as processed foods and beverages like wine and beer, primarily exported by countries such as Peru, Colombia, Ecuador, and Mexico. This diversification not only strengthens the region's position in international markets but also allows it to adapt to changing global market demands, mitigating risks associated with dependence on a single type of product or market.

TABLE 1. SPECIALIZATION OF EXPORTS BY PRODUCT TYPES AND MARKETS⁶

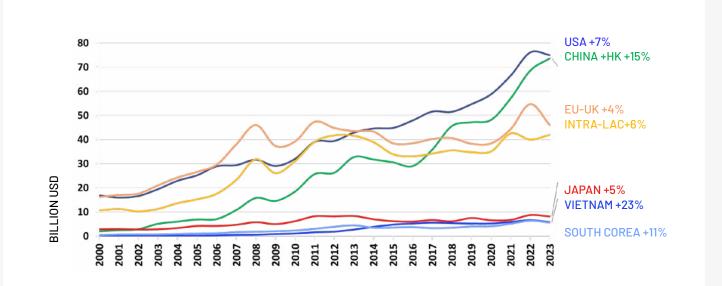
Characteristics	Commodities	Specialties
Main subregion	Southern cone	Other subregions
Main products	Soybean, corn, wheat, rice, meat (beef-chicken- pork), sugar, coffee, forestry products, cotton, orange juice, biofuels.	Fruits and vegetables (fresh and pro- cessed), flowers and nurseries, fish, wine- beer-distilled beverages, processed food, snack foods.
Main countries	Brazil, Argentina, Paraguay, Uruguay	Peru, Colombia, Ecuador, Mexico, CACM

Source: The authors

⁶ Note: EU: European Union; UK: United Kingdom; LAC: Latin America and the Caribbean; MENA: Middle East and North Africa; ASEAN: Association of Southeast Asian Nations; US: United States; CACM: Central American Common Market; EFTA: European Free Trade Association

Regional specialization not only strengthens the exportable supply but also facilitates entry into strategic markets, as shown in Figure 10. It is crucial to highlight the growing importance of China, which has emerged as one of the region's primary markets, with an average annual growth rate of 15%, reaching just over \$70 billion in 2023. This increase reflects China's rising demand for food and its reliance on Latin American imports to ensure its food security. Other important markets include the European Union and the United Kingdom, which have maintained an average annual growth rate of 5%, as well as Japan, with a 5% annual growth rate, and intra-LAC (Latin America and the Caribbean) exports, which have increased by 6% annually, underscoring the relevance of intraregional trade. Exports to the United States remain the primary destination, showing a growth rate of 7% annually. Additionally, significant increases are observed in emerging markets such as Vietnam, which records a remarkable 23% annual growth, and South Korea (+11%), indicating a diversification of target markets for Latin American agri-food products. This diversification not only expands the region's global reach but also reduces dependence on traditional markets, thereby strengthening its position in global trade.

FIGURE 10. LATIN AMERICA: MAIN DESTINATIONS FOR AGRICULTURAL EXPORTS (IN BILLION USD AND AVERAGE ANNUAL GROWTH RATES)

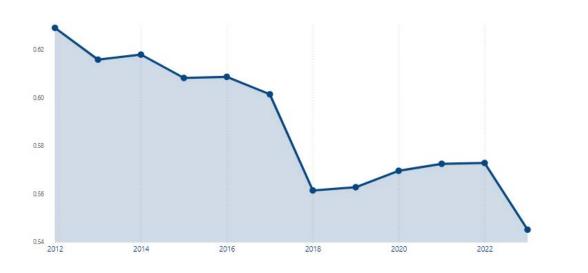


Source: Prepared by Insper Agro Global based on data from UN Comtrade and TDM (2024).

It is important to note, however, that the increasing concentration of Latin America's agri-food exports has been reflected in a decrease in the geographic diversification index, which fell from 0.63 in 2012 to 0.55 in 2023 (Figure 11). This highlights the need to continue diversifying both products and markets to ensure that Latin America maintains its strong position in global trade.

FIGURE 11.

LATIN AMERICA AND THE CARIBBEAN (20 COUNTRIES): GLOBAL GEOGRAPHIC DIVERSIFICATION INDEX FOR AGRI-FOOD EXPORTS (INDEX 0-1; 2012-2023)



Source: OPSAa (https://opsaa.iica.int/commerce) based on data from TDM, consulted on 5/17/2024.⁷

In the face of the challenge of greater diversification, it is crucial to capitalize on the region's varied microclimates and its north-south orientation, which allow for diverse and continuous agricultural production throughout the year. This is complemented by vast areas of arable land and abundant water

⁷ Note: The GDIX used in OPSAa differs from the traditional index derived from the Herfindahl-Hirschman Index (HH) as it is adjusted for the export share from the rest of the world to each destination country. For more details, refer to Cabral da Costa, Søndergaard, and Savoyá (DOI: 10.5897/JDAE2021.1285). Data as of 05/17/2024.

resources. This natural foundation is enhanced by a wealth of knowledge and experience, a strategic geographic position facilitating access to global markets, and the continuous modernization of agricultural infrastructure.

This capacity for continuous production is strengthened not only by modern agri-food infrastructure but also by a highly specialized human capital in areas such as agronomy, biotechnology, and environmental sciences, supported by a robust network of renowned agricultural research centers both nationally and internationally.

Internationally, several centers from the Consultative Group on International Agricultural Research (CGIAR) stand out, such as CIAT in Colombia, CIMMYT in Mexico, and CIP in Peru. Nationally, institutions like INTA in Argentina and EMBRAPA in Brazil play a fundamental role in agricultural research and development.

These centers, along with other regional institutions like CATIE in Costa Rica and IICA, form a knowledge network that drives innovation, research, and agricultural adaptation to contemporary challenges such as climate change, food security, and environmental sustainability.

Thanks to its productive capacity and innovation network, Latin America is well-positioned to play a crucial role in feeding the growing global population, not only by expanding its already significant agricultural production but also by adopting sustainable practices to ensure long-term food security (Morris et al., 2024).

Latin America and the Caribbean are in a privileged position to develop innovative solutions to challenges such as droughts, floods, and pests, benefiting not only its own producers but also other regions facing similar challenges. This positions the region as an important hub for agricultural research and development in climate change adaptation, contributing significantly to global food security.

A key factor enhancing LAC's role in global food security is its extensive network of trade agreements. The region actively participates in the World Trade Organization and has established numerous preferential agreements with strategic partners worldwide. These agreements, which include intraregional pacts such as Mercosur, the Central American Economic Integration Treaty, and the Pacific Alliance, as well as treaties with the European Union, countries in Asia, and the United States, facilitate access to global markets for LAC's agricultural products.

This trade platform offers multiple advantages: it reduces tariff and nontariff barriers, allows producers to diversify their markets, provides a stable framework for long-term trade, and fosters the transfer of technology and best agricultural practices. All of this helps consolidate LAC as a reliable and accessible global food supplier.

However, Latin America and the Caribbean also face significant challenges in their role as guarantors of global food security. These include the need to strike a balance between exports and domestic food needs, continuous adaptation to climate change, implementing more sustainable agricultural practices, improving transport and storage infrastructure, and sustained investment in technological innovation. Despite these challenges, with a strategy focused on diversification, sustainability, and innovation, Latin America can further solidify its position as a leader in ensuring global food security.

Recommendations to increase food trade and improve global food security

Based on the described international context and within the framework of the G20 Agricultural Working Group, this document presents a series of policy recommendations aimed at optimizing international trade and improving global food security. These policies are grouped into three main pillars: (1) Multilateral and regional agreements; (2) National trade policies; and (3) Macroeconomic and sectoral policies.

Multilateral and regional agreements

To strengthen the global trade system and ensure an equitable and sustainable distribution of food, it is essential to implement a series of strategic actions. Firstly, international trade agreements play a crucial role in facilitating the exchange of food between countries and reducing barriers that hinder access to global markets. These agreements not only establish norms and standards to ensure food quality and safety but also promote fair and sustainable trade practices. In this context, strengthening the role of the World Trade Organization (WTO) is a crucial priority. The WTO, as a guardian of an equitable and sustainable trade system, needs to revitalize its dispute resolution system to make it more operational and effective. This improvement is essential to maintaining confidence in the multilateral trade system and ensuring that disputes are resolved fairly and promptly. This will provide greater stability and predictability in international trade, benefiting all stakeholders.

At the same time, it is imperative to conclude pending agricultural negotiations. Issues such as food security reserves, domestic support, and market access are crucial to ensuring a fairer and more efficient agricultural trade. Additionally, in an increasingly emergency-prone world, it is vital to limit export restrictions and instead seek agreements that facilitate the export of essential goods during crises, avoiding restrictions that could exacerbate global food insecurity. This measure will ensure the continued flow of food and other critical products in emergencies and prevent food crises.

The implementation of a global labeling system is another fundamental action. This unified international system will provide clear and accurate information to consumers about food products, allowing them to make informed decisions and fostering market transparency.

To improve trade negotiations, it is essential to promote transparency through the exchange of agricultural data and information. This will enable more informed and equitable negotiations, promoting fairer and more efficient trade.

In addition, greater commitment to mutual recognition and equivalence of sanitary and phytosanitary measures (SPS), as well as scientific-based technical barriers to trade (TBT), are crucial. This will significantly contribute to the smooth functioning of international food trade and ensure that products meet the necessary standards to protect public health and the environment. Given the current challenges in global trade, advancing plurilateral agreements presents a promising alternative to the WTO's "single undertaking" principle. This flexibility would allow for faster progress in specific areas of trade, better adapting to the changing needs of the international trade landscape.

Finally, for these efforts to have a globally equitable impact, it is crucial to decentralize the WTO's technical assistance and training functions. Taking these resources beyond Geneva, to various regions of the Global South, would help develop trade capacities in developing countries, thus fostering more active and beneficial participation in international trade.

In summary, these measures, implemented in a coordinated and coherent manner, have the potential to create a more predictable and transparent trading environment. This would not only help stabilize food prices but also improve access to a variety of food products and strengthen the resilience of global food systems, thereby contributing to greater global food security.

National Trade Policies

To optimize trade and improve global food security, it is equally crucial to implement effective national trade policies. In this regard, reducing trade barriers emerges as an unavoidable priority. This strategy involves not only lowering tariffs but also eliminating non-tariff barriers that hinder agricultural trade flows. At the same time, streamlining food supply chain logistics and minimizing associated trade costs are both essential to creating a more favorable environment for international food exchange. In this context of trade modernization, digitalization and regulatory convergence become fundamental issues. Implementing digitalized origin requirements, along with harmonizing sanitary standards, not only reduces trade costs but also contributes to the standardization of technical and phytosanitary norms. This process of harmonization greatly facilitates international trade by removing unnecessary barriers and fostering a more integrated and efficient global market.

The development of comprehensive trade policies constitutes the next logical step in this evolution. By crafting these policies to carefully balance commercial efficiency with health, safety, and environmental sustainability standards, governments can create a trading environment that benefits both producers and consumers. In this context, preferential trade agreements emerge as valuable tools to improve market integration and simplify rules of origin, thus facilitating better access to international markets.

However, the environmental aspect of trade cannot be overlooked. International cooperation and targeted financing are key instruments for addressing environmental concerns that negatively impact food trade. This holistic approach ensures that commercial growth is achieved without compromising environmental sustainability.

Macroeconomic and sectoral policies

National trade policies must be complemented by robust macroeconomic and sectoral strategies to optimize trade and strengthen global food security. In this regard, policies such as fiscal, monetary, and exchange rate measures, the optimization of the country's resource use, the promotion of technology and infrastructure, the alignment of subsidies with sustainable food security goals, the strengthening of domestic trade promotion, the encouragement of environmental and sustainable standards, the facilitation of regional food trade, and the adoption of a uniform concept for sustainable food systems are essential.

It is imperative to recognize the crucial role of fiscal, monetary, and exchange rate policies in the composition of the trade and payments balance, directly influencing the competitiveness of agricultural exports and the country's economic stability. Assertive implementation of fiscal, monetary, and exchange rate policies lays the foundation for a stable and predictable economic environment, which is fundamental for international trade.

In this macroeconomic framework, optimizing value propositions at the national level becomes particularly relevant. The strategic use of natural resources, technology, geographic location, and human capital not only enhances market reach and efficiency but also boosts the country's competitiveness on the global stage.

The promotion of technological and infrastructure improvements is an essential catalyst for increasing productivity and resilience in the agricultural sector. These investments, coupled with a careful alignment of subsidies and domestic support with sustainable food security goals, minimize market distortions and foster balanced and sustainable growth.

Strengthening domestic trade promotion, with a particular emphasis on technological improvement and capacity building for SMEs, stands as a key strategy for improving access to global markets. This approach not only benefits individual businesses but also contributes to the overall economic development of the country.

In the pursuit of more sustainable trade, promoting environmental standards becomes imperative. These standards not only drive green investments and sustainable practices but also address environmental issues that could hinder long-term trade.

Facilitating regional food trade through agreements, investments in infrastructure, and common standards represents a crucial step towards greater trade integration. This regional approach not only strengthens economic ties between neighboring countries but also creates a more resilient and diversified market.

Finally, adopting a uniform concept and position for Sustainable Food Systems (SFS) represents the culmination of these efforts. This comprehensive strategy not only promotes sustainable international trade but also acknowledges the need for financial assistance for its effective implementation, especially in developing countries.

In summary, these interconnected and multifaceted policies have the potential to transform the global food trade landscape, promoting a more equitable, efficient, and sustainable system that significantly contributes to global food security.

CONCLUSION

The analysis of global food security reveals a complex and challenging landscape. The persistence of malnutrition, limited access to healthy diets, and deep regional inequalities underscore the urgency of concrete and coordinated actions.

International trade emerges as a crucial tool for addressing these challenges. Its ability to impact all four dimensions of food security—availability, access, utilization, and stability—makes it a central component of global strategies.

In this context, Latin America plays a crucial role in global food security. In a world where food demand increases annually, driven both by rising per capita income in emerging countries and by growing urban populations, the region stands out as the largest net exporter of agri-food products.

The process that has led to this position is a subject of study for other regions looking to follow a similar path. Through increased productivity in products such as soy, corn, coffee, and wheat, the Southern Cone has boosted food export growth in the region. At the same time, other Latin American countries have opted to add value to the beverage, fish, and fruit chains, as well as open new markets through trade agreements with the U.S. and the EU.

The proposed recommendations include a combination of actions, from reforming multilateral agreements to implementing specific national and sectoral policies. Modernizing the WTO, reducing trade barriers, digitalizing processes, and promoting sustainable agricultural practices are just some of the necessary steps to build a more resilient global food system.

However, it is crucial to recognize that the success of these measures depends on their coordinated implementation and consideration of local and regional realities. The diversity of consumption and production patterns, as well as variations in import dependence between regions, require tailored and flexible approaches.

The path to global food security is possible, and the tools and knowledge are within our reach. With a renewed commitment to international cooperation, evidence-based policies, and a focus on sustainability, we can move toward a future where access to nutritious and sufficient food is a reality for all.

REFERENCES

- Cabral da Costa, C., Søndergaard, N., & Jank, M. S. (2024). The diversification of global agribusiness trade from 2000-2019. *Journal of Development and Agricultural Economics*, 16(3), 145-165. https://doi. org/10.5897/JDAE2021.1285
- Díaz-Bonilla, E., Trigo, E., & Campos, R. (2024). Acerca de los sistemas alimentarios 'fallidos' y otras narrativas. Instituto Interamericano de Cooperación para la Agricultura (IICA). San José, Costa Rica. Available at: https://repositorio.iica.int/bitstream/handle/11324/22073/ BVE24034040e.pdf?sequence=14&isAllowed=y
- FAO (2006). Policy Brief June 2006, Issue 2: Food Security. Consulted at https://www.fao.org/fileadmin/templates/faoitaly/documents/pdf/pdf_Food_security_Cocept_Note.pdf
- **FAO,** (1996), World Food Summit: Rome Declaration on World Food Security and World Food Summit Plan of Action, Rome, 1996
- FAO, IFAD, PAHO, UNICEF and WFP. 2023. Regional Overview of Food Security and Nutrition – Latin America and the Caribbean 2022: towards improving affordability of healthy diets. Santiago.
- HLP (High Level Panel of Experts on Food Security and Nutrition) (2024). Conflict-induced acute food crises: potential policy responses in light of current emergencies. Available at <u>https://www.fao.org/cfs/cfs-hlpe/</u> en Consulted 7 Aug. 2024.

- International Food Policy Research Institute. 2024. 2024 Global Food Policy Report: Food Systems for Healthy Diets and Nutrition.
 Washington, DC: International Food Policy Research Institute. <u>https://hdl.</u> handle.net/10568/141760
- Jank, M., Arias, J., Abdalla, M., Cardoso, V., Conislla, M., Diaz-Bonilla, E., Gilio, L., Salazar, E., & Vega, K. (2024). International Trade and Global Food Security. Presented at the 3rd G20 Agriculture Working Group Meeting (MPA), IICA and INSPER Agroglobal.
- Morris, M., Sebastian R., Perego, V. (2020). Panoramas Alimentarios Futuros: Reimaginando la Agricultura en América Latina y el Caribe. World Bank. Washington DC. Available at https://opsaa.iica.int/resource-1523-panoramas-alimentarios-futuros:-reimaginando-la-agricultura-enamerica-latina-y-el-caribe
- Rodríguez Sáenz, D., Bianchi, E., & Campos, A. (2021). El comercio internacional de productos agroalimentarios de América Latina y el Caribe y la transformación de los sistemas alimentarios. Instituto Interamericano de Cooperación para la Agricultura (IICA). Retrieved from https://www. iica.int/sites/default/files/publications/files/BVE21088342e.pdf
- WFP, (2009),"Hunger and Markets", World Hunger Series, WFP, Rome and Earthscan, London, 2009
- World Trade Organization. (2022). *Ministerial Declaration on the Emergency Response to Food Insecurity*. Retrieved from https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:/WT/MIN22/28.pdf