T20 POLICY BRIEF



Task Force 01

FIGHTING INEQUALITIES, POVERTY, AND HUNGER

Role of G20 in Enhancing Institutional Quality for Ensuring Global Food Security

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Abstract

Food security (FS) is the availability, access, and affordability of food to meet dietary needs for a healthy life. Institutions that create order in society by reducing uncertainties like resource unavailability, conflict, and poor governance play a crucial role in FS. Key institutional qualities include democracy, the rule of law, control of corruption, political stability, regulatory quality, and property rights. These qualities enhance agricultural productivity and ensure food availability, access, and affordability. Despite technological advancements increasing global food production, challenges such as post-harvest losses, trade policies, supply chain disruptions, conflicts, climate change, lack of cold storage, and pandemics still hinder FS. Food and Agriculture Organization (FAO) reports that 9.2% of people were unable to meet their dietary needs in 2023, down from 12.7% in 2000. Progress toward global FS is slow, and these challenges hinder the achievement of Sustainable Development Goal 2030 commitments despite political pledges at international levels. This policy brief argues that robust institutions, aligned with effective governance, policies, and regulatory frameworks, are crucial for responding to FS challenges. We propose strategic pathways through which institutional quality contributes to FS and call for innovation in institutional quality-building through policy advocacy, capacity building, financial support, infrastructure development, and international collaboration. The brief also aims to guide G20 and G7 nations through Think20 in building a global governance framework for resilience in FS, ensuring food production, access, and utilization.



The global & local institutional arrangements

Institutions are the constraints that structure political, economic, and social interaction to create order in a society or a country, such as democracy, the rule of law, control of corruption, political stability and absence of violence, voice and accountability, regulatory quality, and property rights¹. For instance, weak institutions exacerbate food insecurity through various channels, such as political turmoil (instability) in one country disrupts food production, cultivation, market access, distribution, and trade, leading to global food shortages and price instability². Similarly, when there is government instability, it deters investment in agriculture, impeding technological adoption and deteriorating the country's income. Therefore, weak governing institutions create obstacles to agricultural and economic development, resulting in the vulnerability of several components of food security, thereby exacerbating disparities in food access, availability, and utilization at a local and global level, posing long-term food stability and utilization challenges. Both global and local food security depends on institutions, policies, and processes that shape food production, distribution, and consumption. Effective institutions are crucial for maintaining food and nutrition security; achieving these goals is unattainable without robust institutional frameworks. There is a demand for strengthening governance, the rule of law, regulatory frameworks, stability, and strong

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¹ North, "Institutions."

² Koren and Bagozzi, "From Global to Local, Food Insecurity Is Associated with Contemporary Armed Conflicts"; Nguyen et al., "Interstate War and Food Security: Implications from Russia's Invasion of Ukraine."



legal institutions at the country level in developing countries³. Maintaining global food governance requires cross-border collaboration, focusing on food systems, food security initiatives, nutrition, health policies, sustainable agriculture, civil society engagement, stakeholder involvement, and knowledge sharing⁴. Global organizations and local country-level governments must collaborate through conventions and agreements to enhance institutional quality and ensure food security. Current global institutional arrangements are insufficient, necessitating a redesigned governance system using existing organizations as foundations⁵. It is essential to transform the global food system into a resilient and sustainable one to ensure that everyone has access to high-quality food, and that requires effective coordination between agricultural science and policy⁶. Strengthening the connection between science and policy requires creating actionable knowledge and innovative models through expertise while bridging local and global actions. This calls for an institutional transformation at national, regional, and global levels, collaborating with international organizations, the scientific community, and research organizations to share state-of-the-art, solution-oriented knowledge⁷.

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³ van de Walle, "The Institutional Origins of Inequality in Sub-Saharan Africa."

⁴ von Braun and Birner, "Designing Global Governance for Agricultural Development and Food and Nutrition Security."

⁵ von Braun and Birner.

⁶ Hainzelin et al., "How Could Science-Policy Interfaces Boost Food System Transformation?"

⁷ Fears and Canales, "The Role of Science, Technology and Innovation in Transforming Food Systems Globally."



Global food security scenario

We analyze the food security index from the Economist 2022, covering 113 countries since 2012, and provide insight into institutional landscapes. Global food security hinges on various factors beyond mere agricultural production capacity. Multiple factors play important roles, such as declining agricultural productivity, inadequate infrastructure, economic instability, government policies, and technological advancements impacting food affordability, accessibility, utilization, and stability in conjunction with the often-overlooked institutional quality⁸.

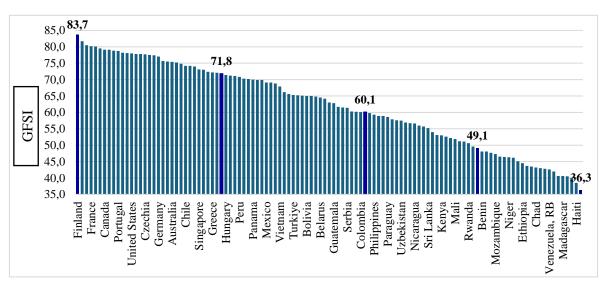


FIGURE 1. Global Food Security Index (GFSI)-2022

Notes: GFSI: Global Food Security Index

Saharan Africa and Asia?"

Source: Authors' creation using the database of The Economist (accessed on March 14, 2024).

⁸ Schouten, Vink, and Vellema, "Institutional Diagnostics for African Food Security: Approaches, Methods and Implications"; Soko, Kaitibie, and Ratna, "Does Institutional Quality Affect the Impact of Public Agricultural Spending on Food Security in Sub-



The global food security index reflects affordability, availability, quality, and safety.

Figure 1 illustrates a significant disparity in food security status between high-income and low-income economies. We have divided selected countries into four quarters (high food secured to low) that are reflected by a dark purple color.

High-income economies generally exhibit better food security, with Finland ranking at the top and the Syrian Arab Republic at the bottom. Approximately 42% of economies have a food security index below 60, indicating substantial global challenges in achieving food security.

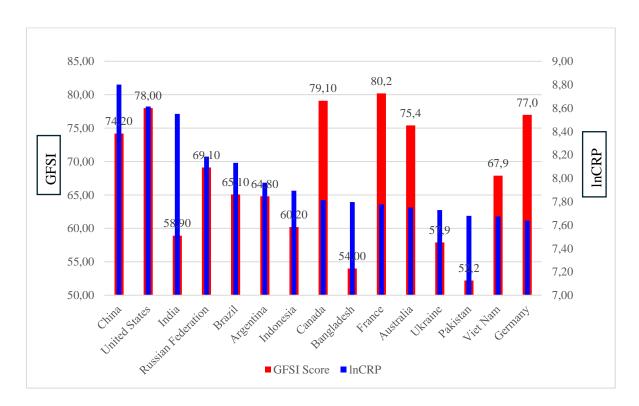


FIGURE 2. Cereal Production and Food Security

Notes: lnCRP: Natural logarithms of cereal productions metric tons; GFSI: Global Food Security Index

Source: Authors' creation using databases of World Development Indicators (WDIs) and the Economist (accessed on 17 and March 14, 2024).



Figure 2 compares cereal production and the global food security index among the top ten cereal-producing economies in 2022. Increased production can enhance food availability and access, but disparities in affordability and utilization persist. This demonstrates the coexistence of food-secure and food-insecure populations within countries. Despite similar frameworks, disparities require concerted efforts to improve institutional quality and ensure equitable access to food resources.

Figure 3 depicts a correlation between food security and institutional quality, particularly **c**omprising an average of six worldwide governance indicators. The institutional quality index is an average of six components of world governance indicators. They are control of corruption, rule of law, political stability and absence of violence/terrorism, government effectiveness, voice and accountability, and regulatory quality. The score is from -2.5 to +2.5, with a higher score representing better institutional quality. This correlation emphasizes the critical role of robust institutions in ensuring better food security. For example, institutional qualities such as corruption and weak rule of law impede efficient food production and distribution, thereby diminishing agricultural outputs and limiting food availability.





FIGURE 3. Food Security and Institutional Quality-2022

Notes: GFSI: Global Food Security Index.

Source: Authors' creation using World Governances Indicators (WGIs) of the World Bank (accessed on March 14, 2024).

Solid institutions propel economic development and enhance access to quality food by bolstering income levels. Indicators such as voice, political stability, and the absence of violence shape institutional dimensions such as government effectiveness and regulatory quality, thus reinforcing the interconnectedness between governance and food security. For instance, in **Figure 3**, countries like Singapore, Japan, Australia, France, and Ireland ensure food security through innovative policies, investments in technology, global distribution channels, and sustainable agriculture practices supported by a well-established institutional framework. In contrast, Yemen's (political instability) civil war-induced displacement and economic instability have led to severe food insecurity. Venezuela faces economic collapse and political turmoil, resulting in high levels of household food insecurity. Grappling with significant food security challenges, Nigeria



projects a considerable portion of its population to be food insecure, highlighting the scale of the issue in Sub-Saharan Africa.

Pathways for food securities via institutional quality

Strong institutions are associated with stable food supplies, enhanced access to nutritious food, and reduced levels of food insecurity. Countries with strong rule of law, low corruption, political stability, absence of violence, and high levels of voice and accountability tend to have better regulatory quality and government effectiveness in ensuring food security by improving distribution efficiency and promoting fair trade practices and sustainability, contributing to food availability, access, and utilization⁹. A strict rule of law provides legal certainty and protection of property rights, which are essential for attracting agricultural investments and ensuring land tenure security, thus supporting both the affordability and availability of food¹⁰. Institutional quality influences market functioning by shaping competition, pricing mechanisms, and transparency, thereby enabling fair prices for farmers and enhancing overall food affordability, availability, and access¹¹. Institutional quality ensures the transparent and *effective* utilization of human and financial resources to scale up food production, optimize workforce deployment, and contribute to increased food production and availability¹².

⁹ Mellor, "Global Food Balances and Food Security"; Khoury et al., "Increasing Homogeneity in Global Food Supplies and the Implications for Food Security."

¹⁰ Khoury et al., "Increasing Homogeneity in Global Food Supplies and the Implications for Food Security."

¹¹ Subramaniam, Masron, and Subramaniam, "Institutional Quality and Food Security."

¹² Subramaniam, Masron, and Subramaniam.



Institutions help promote equitable access to food by directing financial resources toward addressing the needs of the poorest and most vulnerable segments of society, thereby enhancing accessibility. Adequacy of food *security/nutrition knowledge enhancement* through providing education and awareness programs empowers individuals to make informed decisions about their diet and food consumption, ultimately improving utilization practices and contributing to better food security and nutrition outcomes¹³. Ultimately, institutional quality is pivotal in shaping a country's food security landscape, contributing to equitable food access, availability, and resilience against food crises¹⁴.

Improving the quality of institutions related to food security involves various strategies such as capacity building, governance strengthening, promoting transparency, and ensuring accountability. This includes encouraging collaboration among governments (local), global organizations, Non-Governmental Organizations (NGOs), the private sector, and supporting institutions. It is also important for securing funding, supporting research and innovation, and engaging with local communities together with international organizations like the FAO, World Food Programme (WFP), and World Health

Godfray et al., "Food Security: The Challenge of Feeding 9 Billion People"; Subramaniam, Masron, and Subramaniam, "Institutional Quality and Food Security."

Godfray et al., "Food Security: The Challenge of Feeding 9 Billion People"; Subramaniam, Masron, and Subramaniam, "Institutional Quality and Food Security"; Osabohien, Osabuohien, and Urhie, "Food Security, Institutional Framework and Technology: Examining the Nexus in Nigeria Using ARDL Approach"; Ashraf and Javed, "Food Security and Environmental Degradation: Do Institutional Quality and Human Capital Make a Difference?"; Oyelami et al., "Climate Change, Institutional Quality and Food Security: Sub-Saharan African Experiences."



Organization (WHO) taking important leadership, where the private sector can contribute through technology and supply chain improvements. Effective coordination, support from global organizations, and incentivizing the private sector through government policies are critical pathways. Financial institutions provide services to enable higher agricultural productivity and easy financial accessibility, while educational and research institutions provide important lessons by generating ideas and know-how, and governments and international organizations must govern and support these efforts. Improving these institutional frameworks involves strategies like knowledge sharing, governance reforms, and partnerships to leverage resources and expertise.

The role of Think20 (T20)

T20 can advocate within the G20 for the implementation of a comprehensive framework aimed at strengthening institutional quality, mainly focusing on the credibility and capacity of governments to commit to, formulate, and implement policies. This entails reinforcing the principle of governance wherein all subjects are accountable to the law, thereby providing stability to government operations and reflecting both internal and external stability within the political system. Improving these three essential qualities – government effectiveness, regulatory quality, and the rule of law – profoundly impacts the food production system. It directly influences food accessibility for people experiencing poverty and significantly affects the quality and safety of food produced and distributed. Transparent and accountable governance mechanisms are vital in enforcing regulations and standards. Therefore, engaging with all G20 nations, international organizations, donor agencies, and development partners is imperative to garner support and funding for governance reforms.



Actions

- 1. Multilateral organizations of G20 should lead in educating policymakers, stakeholders, and the public about the importance of good governance, institutional quality, transparency, and accountability in ensuring food security. These organization can leverage their global reach and expertise, and they can advocate for the existence of legal protection of the right to adequate food as a fundamental human right. Through such educational campaigns, policy briefings, and collaborative initiatives, they can highlight the importance of transparent and accountable governance mechanisms in promoting equitable access to food systems.
- 2. The multilateral and regional organizations of the G20 should foster collaboration among government agencies, civil society organizations, academia, and international partners to advocate for governance reforms to strengthen institutional capacities for food security. They can build coalitions and partnerships where the G20 can amplify immediate access to food for the most vulnerable households through initiatives such as cash and food transfers. Additionally, the G20, via multilateral organizations, can promote agricultural development to enhance people's access to resources and means of livelihood, thereby contributing to long-term food security and sustainability.
- **3.** G20 by involving ministries and public institutions among its countries shall push forward multilateral agreements for advocacy of establishing high-level food security and nutrition policy-setting mechanisms. Improve governance and coordination actions across sectors in the Global South that are involved in the food system.



- **4.** Prioritize collaboration within the G20 by fostering and strengthening systems for evidence-based food security and nutrition decision-making. Capacity building and support for governments to establish structured frameworks for regular monitoring and evaluating food security and nutrition policies and programs.
- **5.** G20 should focus on providing aid to nations by creating efficient mapping systems to monitor ongoing interventions and allocate resources effectively. It should also assist in developing comprehensive national food security and nutrition information systems, ensuring sufficient financial resources and technical support. Additionally, the G20 should build a resilient domestic supply chain, and global distributions should not be disrupted at any cost or in any case of urgency to take arbitrary advantages.

Policy highlights

- 1. Enhance global political commitment: Develop and implement policies, strategies, and programs to support food security and nutrition, demonstrating strong global political commitment.
- 2. Allocate adequate resources: Ensure sufficient human and financial resources are allocated to translate government policies of weak institutional countries for effective action plans for scaling up food supplies and improving nutrition.
- **3. Improve governance and coordination**: Enhance governance and coordination mechanisms, as well as partnerships across sectors such as agriculture, education, health, and social welfare, to strengthen food security at both national and global levels.



- **4. Promote evidence-based decision-making:** Assess food security-related policies and programs to ensure they are based on evidence and are effective in addressing food security challenges.
- **5. Collaborate with civil society:** Work with civil society and institutions to protect and ensure the human right to adequate food and foster collaboration and participation in food security initiatives.



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