
# Agriculture Working Group

# Issue Note

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## I. Background

According to the Food and Agriculture Organization (FAO, 2023), it is estimated that between 691 and 783 million people in the world faced hunger in 2022.[1] The Covid-19 pandemic, combined with the climate crisis and, more recently, political conflicts, have highlighted the weaknesses of global agrifood systems, as well as the urgent need for improvement to accelerate advances in the worldwide endeavor to reduce food insecurity and promote sustainability. With population growth projected for the coming decades, the imperative is to sustainably increase and diversify agricultural production while promoting socially inclusive economic growth through productive activities, and environmental protection.

Agrifood systems at global, national, and local levels still face challenges regarding the environment, human health, and social welfare. Increasing food production is still important but no longer the only issue. A third of the food produced is lost or wasted (FAO, 2023),[2] while the increasing prevalence of malnutrition is at the root of rising obesity and diet-related diseases (UNEP, 2021). [3] Agrifood systems are strategic to "Building a just world and a sustainable planet", the motto of the Brazilian Presidency of the G20.

Agriculture is expected to provide enough good quality, healthy, and affordable food for the growing population and may help to regenerate nature through the recovery of biodiversity, soil, and water while promoting local socio-economic development. At the same time, it is the most vulnerable production system to adverse climate change impacts such as the increase in extreme weather events. Therefore, future agriculture will need to develop technologies that promote resilience, and the expansion of public policies that enable people living and working in rural areas to adapt to climate change.

Agriculture can exert a transformative influence towards sustainable development due to its capacity to simultaneously address the social, economic, and environmental pillars. From the Brazilian perspective, renewable energies, biofuels, bioeconomy, green industries, low-carbon agriculture, agroecology, and specific policies to strengthen family farming must generate jobs and income, including the sustainable development of local and traditional communities.

It is crucial, however, to bear in mind that there is no single solution to promote access to safe and nutritious food for all, nor a single agrifood system that applies to all countries. Considering that such systems are multifaceted and encompass several elements, such as historical land use patterns, culture, climate, soil, technology, production systems and scales, economic, political systems, and other factors, debates on the future of agriculture and food production must take into account the needs, priorities, characteristics, policies, and challenges of different countries. And they must, crucially, respect the principle of common but differentiated responsibilities which apply to all three conventions that emerged from the Rio 92 conference, respectively:

on climate, biodiversity, and desertification. Regarding climate change impacts on food security and rural productivity, countries shall have a systemic vision that combines domestic production with a balanced and equitable international trade environment. This resonates with what the OECD has called the Triple Challenge (OECD, 2021) of global food systems: i) ensuring food security and nutrition for a growing population, ii) providing livelihoods for farmers and others in the food chain, and iii) improving the environmental sustainability of the sector. Developing actions that incorporate these dimensions in a coordinated manner is essential.

International trade of agricultural products and food plays a strategic role in promoting food and nutritional security by expanding supply possibilities and balancing food distribution among countries, in light of climate change effects. Therefore, it is important that international trade and national food systems mutually support each other to ensure food and nutritional security for populations, according to the specific needs and challenges of each country.

Equally crucial is overcoming obstacles to international trade in agricultural products and food, such as distortive trade measures and arbitrary, disguised, and unjustifiable barriers. This includes mitigating distortive subsidies and adopting transparent and evidence-based sanitary and technical measures. By promoting a fair and balanced trade environment, the G20 can expand opportunities for food exports, generate jobs and income in the agricultural sector, and contribute to national and global food security. In that sense, free trade may increase the world's food supply and allow producers to make the best allocation in terms of productivity, efficiency, and production resilience. Therefore, the search for a more balanced and equitable agricultural trade regime should be a central part of the G20 agenda.

Food security is an issue that should not be confined to national borders. Such policies induce consumers to buy more expensive products, and less competition means that innovation doesn't happen at the right pace. In addition, the selective closure of borders prevents the optimal use of the planet's natural resources, as most of the population is concentrated in certain regions where natural resources are being rapidly consumed. Not to mention the serious risk of shortages in countries closed to trade, due to pests and diseases or climatic problems that can suddenly reduce domestic supplies.

In that sense, it becomes difficult to meet the challenges posed by the volumes demanded by consumers, food quality, health, affordable prices, and sustainability of production by maintaining strong restrictions on trade in agricultural and food products. Therefore, the search for a more open and balanced pattern of agricultural trade should be a central part of the G20 agenda.

During the Indian presidency, the G20 Ministers of Agriculture reiterated their commitment to food and nutrition security through the Deccan High-Level Principles on Food Security and

Nutrition 2023.[4] Additionally, countries reaffirm the significance of strengthening a rules-based, open, predictable, transparent, non-discriminatory, inclusive, equitable, based on scientific principles, and sustainable multilateral trading system with the World Trade Organization (WTO) at its core to enhance market predictability, increase business confidence, and allow agrifood trade to flow to contribute to food security and nutrition. According to the OECD and FAO (2023)[5], international trade plays an important role in the global food system, increasing availability and access to food, especially for countries with limited resources and highly dependent on imports. International trade can also promote economic development by creating opportunities for producers, including small farmers, to access additional markets. In some cases, as in many developing countries, exports of agricultural products are an essential source of income.

## II. Objectives of AWG and priority areas

The Agriculture Working Group (AWG) has become an important forum to strengthen cooperation among G20 members on agriculture-related issues critical to achieving the UN 2030 agenda, especially the Zero Hunger Goal (SDG 2). However, faced with the various transversal and multidimensional crises that put at risk both the progress already achieved and the future fulfillment of sustainable development, G20 countries must intensify their efforts.

Together, G20 countries represent 80% of global GDP, 75% of world exports and almost 60% of the planet's population. However, wealth concentration between and within countries has been increasing exponentially in recent decades. Sustainable development is constantly threatened in its three dimensions: economic, social and environmental. To face these multiple challenges in achieving SDG2, we must face inequality in its multiple forms. At the AWG, inequality of income and access to food should be addressed. That includes all aspects that involve sustainable productivity growth through production systems that are better adapted to the soil, climate and other intrinsic conditions of each country, agrifood systems that connect local and national food producers to consumers at prices that are both remunerative for producers and accessible to consumers and the maintenance of the flow of international food trade focused on expanding the promotion of food and nutrition security.

"Building a just world and a sustainable planet" will be the general guideline for AWG's work in 2024. There is no equitable world with hunger. Neither there is viable collective life on our planet without simultaneously addressing the three dimensions of sustainability. Therefore, Brazil’s presidency of the G20 AWG will prioritize the following issues: (i) Sustainability of agrifood systems in their multiple paths; (ii) Enhancing international trade contribution to food and nutritional security; (iii) Increasing access to markets (local, national, regional, global) for family farmers, peasants, indigenous peoples, and traditional communities; and (iv) Promoting the sustainable integration of fisheries and aquaculture into local and global value chains. The

G20 can endorse initiatives in this direction and coordinate with multilateral institutions to advance towards SDG 2.

**Priority I: Sustainability of agrifood systems in their multiple paths**

*1. Central role of agrifood systems for food and nutrition security, rural development and the sustainable management of natural resources.*

*2. Multifaceted approaches to food security: nutrition, sustainable production, poverty reduction, and the role of international trade.*

*3. Contribution to sustainable productivity growth [sustainable resource efficiency] for healthy food and nutrition security.*

*4. Multiple paths to achieving sustainable food systems based on local realities and characteristics. Example of tropical agriculture and agroecology*

The fight against hunger and poverty is a global priority and one of the main themes of the Brazilian presidency of the G20.

The 2030 Agenda for Sustainable Development reflects a global vision for an inclusive, dynamic and resilient path to prosperity. It commits the international community to act together to address the complex challenges of eradicating poverty and hunger, restoring and sustainably managing natural resources. Agriculture, through its links to food security and nutrition, health and rural development, plays an important role in achieving the entire set of Sustainable Development Goals (SDGs).

In 1948, the United Nations (UN) recognized the right to food in the Universal Declaration of Human Rights and has stressed ever since that it is essential to the enjoyment of all other rights. According to the definition agreed at the 1996 World Food Summit convened by the Food and Agriculture Organization of the United Nations (FAO), “food security means that all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their nutritional needs and dietary preferences for an active and healthy life”, which represent four dimensions: availability, access, utilization, and stability. In 2004, the FAO took a crucial step to integrate human rights into the work of agencies dealing with food and agriculture by adopting the Voluntary Guidelines to support the Progressive Realization of the Right to Adequate Food in the Context of National Food Security (Right to Food Guidelines).

The current main global strategy for eradicating hunger and poverty is indicated in the Sustainable Development Goal 2 (Zero Hunger) of SDGs that states “By 2030, end hunger and ensure access by all people, in particular, the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round”. However, according to FAO estimates, about 2.3 billion people in the world are currently moderately or highly food insecure.

Food security, as an important element of the 2030 Agenda, is closely linked to and shaped by other interrelated issues such as nutrition, adaptation and mitigation to climate change, land and water use and rights, poverty reduction, and international trade. Therefore, there is also a clear need to adopt an integrated and multi-faceted approach to food security.

Reducing malnutrition and improving access to more nutritious foods depend on the ability to sustainably increase and diversify food production, reduce food loss and waste, build a global effort to alleviate income and wealth inequalities that directly impact peoples' access to safe and nutritious foods, and implement social policies to inform consumers and provide access to healthy diets.

The development and implementation of agriculture, food and nutrition security policies enabling sustainable development, and the promotion of countries' commitments to the progressive realization of the right to adequate food in the context of national food security are fundamental steps towards these objectives.

G20 members recognize the importance of sustainable agricultural development and the crucial role of rural economies in eradicating poverty and ensuring income, food security and improved nutrition, strengthening local and regional economies, ensuring prosperity and inclusive growth, and thus helping to consolidate an environment of peace.

During the Indian presidency of the G20, the Working Group on Agriculture adopted a set of High Level Principles on Food Security and Nutrition (Deccan High Level Principles on Food Security and Nutrition), which served as an input for the work of the Task Force to launch a Global Alliance against Hunger and Poverty, to be created during the Brazilian presidency. In the context of the aforementioned working group, the topic can be addressed from the perspective of increasing food availability through incentives for sustainable productivity growth.

According to the FAO[6], "today a range of pressures including rapid population growth, urbanization, growing wealth and consequent changes in consumption patterns, are challenging our food systems' ability to provide nutritious food, and to contribute to enhanced livelihood opportunities in an environmentally sustainable way. Our food systems are contributing to, and affected by, extreme weather events as associated with climate change, land degradation and biodiversity loss. Responding to these challenges requires a systems-based approach that addresses the range and complexities in a holistic and sustainable manner."

"A sustainable food system is one that delivers food security and nutrition for all in such a way that the economic, social and environmental bases to generate food security and nutrition for future generations is not compromised. This means that it is profitable throughout, ensuring economic sustainability, it has broad-based benefits for society, securing social sustainability, and that it has a positive or neutral impact on the natural resource environment, safeguarding the sustainability of the environment."

The FAO Strategic Framework 2022–2031[7] reflects our full commitment to the 2030 Agenda for Sustainable Development and details the reasons why it is vital that agrifood systems are transformed towards more efficiency, inclusivity, resilience, and sustainability. However, it will not be easy to produce more food while reducing inputs and keeping pace with increasing demand, and simultaneously addressing the many issues that currently represent barriers to affordable, healthy diets, livelihood opportunities, and elimination of poverty and hunger. Transformation of agrifood systems will demand a mindful application of science, technology, and innovation as well as considering traditional knowledge, in ways that are economically, socially, and environmentally sustainable.

Building international consensus is the first step, but governments will play a crucial role in leading the complex process of transforming national food systems, combining regulatory measures with direct intervention through public policies. In light of this, one of the priorities for the G20 is to enhance technical cooperation between countries by sharing experiences of public policies and governmental actions leading to the transformation of food systems towards sustainability, reducing inequalities, adapting to climate change, governing land and water, and promoting the production of healthy food.

While there is no one-size-fits-all model towards sustainable agrifood system transformation, there are some exciting developments and innovations that may prove to be game-changers at national, regional, and global levels.

Over the last 50 years, public and private investments in science, technology and innovation have transformed and revolutionized agriculture. Through the creation of agricultural research centers such as the Brazilian Agricultural Research Corporation (Embrapa), scientists and academics created technology that allowed agricultural production to thrive in previously unproductive areas, developed new plant varieties and animal breeds that were better adapted to different regions, allowing production to increase and diversify. Other techniques to enhance the sustainability of food production, such as the sustainable intensification – that is, enhancing productivity of existing agricultural areas –, made it possible to obtain two harvests per year – and even three in some regions of Brazil –, as well as the production of different crops, livestock, and forestry simultaneously in the same area (Integrated Crop-Livestock-Forestry System). Nevertheless, the development of sustainable production techniques must combine productivity growth with water and soil conservation, the preservation of biodiversity, and other environmentally positive effects, and must be available to all, including small and medium-scale family farmers, peasants, indigenous peoples, and traditional communities.

In animal farming, results are equally remarkable. Over the last two decades, there have been extraordinary gains in the productivity of meat and milk, which has helped to reduce the prices of these items and make animal protein more accessible. Livestock and aquatic animals provide approximately 1.3 billion of the world population with income, nutritious food, clothing, fertilizer, building materials, and traction power, according to the World Organization for Animal Health (WOAH). [8]

In Brazil, for instance, integrated crop-livestock and crop-livestock-forestry production systems have allowed for more efficient use of land and diversification of producer income, while simultaneously making the system more resilient and allowing for significant GHG capture, through public policies developed to foster low-carbon agriculture practices. In this sense, sustainable livestock production systems play a key role in food and nutrition security, livelihoods, employment and decent work, ecosystem services, and the sustainable management of natural resources. Livestock manure is a critical source of organic fertilizer. Globally, hundreds of millions of pastoralists rely on their herds for food, income and as a store of wealth, collateral, or safety net in times of need. Livestock are important assets for vulnerable communities. Additionally, livestock production systems have the potential to contribute to the conservation of biodiversity and carbon sequestration in soils and biomass.

Understanding territories and their different production environments is vital to tailoring enabling strategies and mechanisms for successful sustainable livestock as well as other practices such as agricultural mechanization and digitalization. For each region, there are different environmental, technological, social, and economic challenges.

Recent and significant progress has been achieved in sustainable agricultural mechanization, including appropriate tools, equipment, and machinery adapted to sustainable plant production and protection, land management, and precision agriculture. Such improvements need to be scaled and adapted to local contexts, to achieve sustainable agricultural production and transformation of agrifood systems, protect the environment, manage natural resources, adapt and mitigate climate change while creating decent jobs, social equity, and achieving food security and improved nutrition.

Examples of important strategies that push mechanization transformation towards efficient and sustainable agriculture include financing through governmental programs such as those tailored towards family farmers, to provide access to rural credit for the implementation of sustainable practices and technologies. Other relevant innovations include irrigation technologies, for which investment strategies in research and technical assistance are vital. Fostering cooperativism is another strategy, especially among smallholders to overcome the challenges related to fragmented production. Universalizing connectivity and digital services is also one of the key challenges to upscale sustainable digital agriculture. In this respect, equitable forms of integration between public policies, goods and services provided by private companies and farmers are essential to ensuring food security in the present and future.

However, there are multiple pathways to achieve economic, social, and environmental sustainability in rural areas. Agroecology, regenerative agriculture and nature-based solutions have gained prominence in policy and funding spaces related to food systems. A set of new terms and ideas are guiding public policies, the allocation of national and international resources, and technical cooperation: agroecology, sustainable intensification, conservation agriculture, zero-carbon agriculture, permaculture, biodynamic farming, organic agriculture, holistic resource management, among others (IDS & IPES-Food, 2022). Many routes are being

explored, with exciting opportunities, requiring openness to better understand possibilities, limitations, and learnings so that countries can better shape their different pathways towards the sustainable transformation of food systems.

Bioeconomy can be another approach that integrates innovation and technology with income generation, increased productivity, respect for traditional cultures and knowledge, and environmental conservation. It is a broad topic, and many of its concepts are still under construction. The Brazilian presidency proposes to further this discussion with the creation of a G20 Initiative on Bioeconomy. The Brazilian presidency of the G20 will also be an opportunity to display multiple experiences and facets of tropical agriculture, including those of family farmers, peasants, indigenous and traditional communities, and its importance in promoting sustainable development in the social, economic and environmental pillars, as well as fostering international cooperation for agricultural innovation and the dissemination of good practices to all producers. By taking advantage of the G20 as a platform to share experiences between members and other countries, Brazil hopes to strengthen the view that there are multiple paths towards sustainability, based on respect for sovereignty, local realities, and national development priorities and objectives.

Finally, the Brazilian presidency wishes to emphasize the importance of technical cooperation for the dissemination of good agricultural practices, including modern and resilient production systems, traditional forms of knowledge, and possibilities for GHG capture, as well as soil, water, and biodiversity conservation and regeneration. In the case of tropical countries, trilateral cooperation schemes whereby a developed country provides financial support for the exchange of experiences between developing countries can provide beneficial outcomes to all parties involved.

**Questions for discussion**

1. How can the G20 synergize its efforts in reducing and eradicating hunger and poverty?

2. How can the G20 promote the exchange of best practices and technologies that stimulate the productivity growth of sustainable agricultural models and practices adapted to the realities and characteristics of different countries?

3. How can the G20 stimulate alternative frameworks that integrate economic prosperity, ecological management, and social equity, in addition to efficiency gains?

4. How can the G20 support increasing investments in sustainable agricultural practices?

5. How can the G20 support the dissemination of successful technologies, experiences, and public policies in tropical agriculture, agroecology, and sustainable forestry and fisheries management?

## EXPECTED OUTCOMES AND DELIVERABLES

1) Seminars on advances in tropical sustainable agriculture and agroecology experiences, including peasant and indigenous family farming, to strengthen the sustainability and resilience of agrifood systems in countries in similar situations, to exchange best practices and technologies that stimulate sustainable forms of agriculture adapted to the realities and characteristics of different countries.

2) Support increased investments in sustainable agricultural models.

3) Support bi- and trilateral cooperation on science and technology for tropical agriculture and agroecology.

**Priority II: Enhancing international trade contribution to food and nutritional security**

*1. International trade is an important part of the solution to food insecurity.*

*2. Trade-related measures linked to environmental sustainability objectives must be rooted in international cooperation, scientifically based and compatible with WTO rules.*

*3. Product transformation, besides adding value, may facilitate market access to family farmers and reduce food loss and waste.*

*4. International development banks can play an important role in mobilizing resources, increasing and improving the quality of investments towards more sustainable and productive agricultural models.*

According to the FAO (2019, 2020)[9,10,11] trade can ensure food availability and variety, promote access to food and price stability by transferring food from surplus to deficit countries, and protect populations against economic, climatic, and political shocks. The reports also state that trade can encourage dietary diversity, essential for proper nutrient intake and human health.

Food systems worldwide have not only increased agricultural production in line with population growth but also enhanced production per capita by over 45%. According to the OECD[12], this has implications for nutrition and food affordability. While total agricultural production has tripled, global agricultural land utilization has only risen by 10-15% due to new techniques and technologies that have enabled farmers to deliver substantially more food per land unit.

The new challenges that climate change poses to agricultural production can make it increasingly difficult for countries to guarantee food security solely based on national production. This may increase the importance of trade in guaranteeing the food security of populations and the preservation of ecosystems.

In this sense, predictable and stable multilateral rules are important. Guidelines and regulations directed towards the responsible conduct and environmental sustainability objectives must be rooted in international cooperation, scientifically based and compatible with WTO rules. Furthermore, regulations with heavy impacts over natural resource-rich countries need to consider their specific development needs.

WTO rules help to guarantee a minimal predictability, with a defined import tariffs range, regulating domestic support and providing tools to manage non-tariff barriers. The G20 may collaborate to reinforce and deepen such rules by building trust and resilience, with a view to achieving Goal 2.b of the 2030 Agenda for Sustainable Development ("Correct and prevent trade distortions in world agricultural markets, including through the parallel elimination of all forms of agricultural export subsidies and all export measures with equivalent effect, in accordance with the mandate of the Doha Development Round"). The G20 should stimulate a rules-based, fair, equitable, inclusive, open, transparent, and sustainable multilateral trading system, with the WTO at its center.

Despite the progress made in recent decades, farmers, especially small farmers, still face difficulties in accessing markets. In many cases, further processing of the agricultural product may facilitate its market access, as processed products usually face less stringent SPS requirements, while processing also adds value and provides increased income opportunities.

Several institutions can contribute to promoting actions towards a more sustainable and productive agriculture. The G20 should recall the need for a renewed push towards concluding WTO agriculture negotiations. International development banks can have an important role in mobilizing resources, and increasing and improving the quality of investments to enhance agricultural production. The G20 could coordinate with international financial institutions to seek investments in and with developing countries.

Concerning improving information, the role of the Agricultural Market Information System (AMIS) should be highlighted. The G20 could request AMIS to strengthen discussions on interfaces between agriculture, climate, and the environment, as well as their importance to the global supply of agricultural products. AMIS could also analyze the impact of trade-restrictive measures on the global food supply of key agricultural products in different parts of the world.

**Questions for discussion**

1. How can the G20 build consensus towards unlocking WTO agriculture negotiations and bringing them to a successful and equitable conclusion?

2. How can the G20 collaborate to reinforce the multilateral system, to achieve Goal 2.b of the 2030 Agenda for Sustainable Development?

3. How can the G20 help to enhance market access and reduce trade barriers, particularly for family farmers, through the promotion of product transformation and value addition?

4. How can the G20 coordinate with international financial institutions to promote investments in developing countries towards sustainable practices?

5. How can the G20 enrich globally shared information on food supply? How can it assess the effects of environmental and climate-related restrictions on food supply? How can the effects of trade restrictions on countries' food supply be quantified?

## EXPECTED OUTCOMES AND DELIVERABLES

1) Raise awareness of the need to unlock WTO agricultural negotiations and bring them to a successful and equitable conclusion.

2) Dialogue on how to enhance market access and value addition through product transformation, particularly to benefit family farmers.

3) Promotion of investments towards sustainable practices in developing countries.

4) Mandate for AMIS to analyze how environmental and climate issues, especially resulting trade restrictions, affect food supply, including the quantification of the effects of trade restrictions on food-importing countries' food supply.

### Priority III: Recognizing the essential role of family farmers, peasants, indigenous peoples and traditional communities for sustainable, healthy and inclusive food systems

*1. Family farmers (including peasants, indigenous peoples and traditional communities, fisherfolk, pastoralists, forest collectors, agricultural workers) play a critical role in the transition for sustainable, healthy and inclusive food systems.*

*2. Family farmers can benefit from targeted and synergistic public policies and tailored solutions to facilitate their production and access to the market.*

*3. Special attention will be granted to policies concerning women, youth, indigenous peoples and traditional communities.*

The term 'food system' encompasses a range of activities, including production, processing, transportation, and consumption of food (UN, 2019). The well-being of our food systems significantly influences not only the health of our bodies but also the health of our environment, economies, and cultures (UN, 2019).

Building increasingly sustainable, healthy, and inclusive food systems is a challenge that can only be achieved through actions that integrate these three inseparable dimensions: the well-being of nature, human beings, and society as a whole in a way that does not compromise the possibilities of future societies. For the successful construction of these new systems to occur, some traditionally marginalized actors need to be recognized and included in national transition strategies.

Family farms represent over 90 percent of all farms globally, and produce 80 percent of the world's food in value terms (IFAD, 2019). They are therefore key drivers of sustainable development, including ending hunger and all forms of malnutrition and promoting new opportunities for local development.

According to the FAO, "Family farming (including all family-based agricultural activities) is a means of organizing agricultural, forestry, fisheries, pastoral and aquaculture production that is managed and operated by a family, and is predominantly reliant on the family labour of both women and men. The family and the farm are linked, co-evolve and combine economic, environmental, social and cultural functions" (FAO, 2019). Family farmers contribute to achieving the goals of the 2030 Agenda by producing nutritious food, supporting livelihoods, generating employment and income, diversifying production, and managing land and water resources.

In family farming, the family and the farm form a unified entity that evolves continuously, serving economic, environmental, social, and cultural functions within its local networks. The multifunctionality of family farmers within the community, coupled with their role as stewards of the environment, enables high efficiency and sustainability in the utilization and management of natural resources. This includes the conservation of biodiversity and the prevention of soil depletion, water pollution, and environmental degradation. Due to their multifunctional nature, family farmers possess a unique potential to drive transformative changes in the methods of growing, producing, processing, and distributing food.

On 20 December 2017, the United Nations General Assembly proclaimed the UN Decade of Family Farming 2019-2028 (UNDFF). The UNDFF serves as a framework for countries to develop public policies and investments to support family farming from a holistic perspective, thus contributing to achieve the Sustainable Development Goals (SDGs) by unleashing their transformative potential.

The UN Decade of Family Farming aims to create a conducive environment that strengthens their position and maximizes their contributions to global food and nutrition security, and a healthy, resilient, and sustainable future. Policy formulation and implementation for family farms require a contextualized concept and clear statistical definition of family farming, as well as a detailed picture of the various forms that family farming can take within the national-level strategies of different countries.

With the 2030 Agenda and the UN Decade of Family Farming in mind, the G20 possesses the potential to initiate a renewed cycle of commitments and actions, seamlessly integrating these two agendas within the international community. This initiative aims to align the promotion of a Sustainable Food System with other dimensions of sustainability, including social issues. For instance, it seeks to bolster family farmers, placing a specific emphasis on empowering women, youth, indigenous peoples, and traditional communities. This endeavor also involves exploring

strategies to revitalize rural communities while respecting their profound knowledge of nature, culture, and potential to create opportunities for local development. Furthermore, it includes acknowledging their fundamental role in the production of various ecosystem services. Therefore, it is essential to acknowledge that family farmers are pivotal cross-cutting actors that deserve special attention in the G20's Development, Labour, and Finance agendas.

The challenges faced by family farmers are multifaceted, ranging from limited access to land and water for cultivation to limited access to formal education, energy or digital services. Tackling these challenges in tandem requires a strategic approach.

To support family farmers, combinations of successful and effective specifically tailored policies, programs, and instruments can be useful for G20 members and other countries. In addition to access to agricultural policy tools (rural credit lines, technical assistance, agricultural insurance), family farmers can benefit from synergistic public policies. For example, the Brazilian experience with public procurement programs for healthy school meals sourced from family farmers might be useful. Other policies, such as fostering the production of machinery tailored to the needs of small and medium-scale agriculture, fishing, pastoralism, and forestry activities, can both generate income in rural areas and industrial jobs in cities. Many of these experiences and possibilities can be shared among G20 countries and beyond.

There are also lessons to be learned from family farmers' knowledge of nature accumulated over countless generations, to support the transition towards more sustainable food systems. The wisdom of such forms of agriculture has been studied and organized to help underpin new sustainable production approaches, such as agroecology, bioeconomy, permaculture, among others.

At the last G20 meeting, leaders decided to promote the exchange of best practices on safety nets for small-scale farmers and consumers. They also deliberated on initiatives aimed at supporting traditional crops, such as millet, cassava and others as climate-resilient and nutritious grains that can contribute to food security, value-addition, rural development and poverty alleviation, energy security and bring important macroeconomic benefits. The G20 can sustain the momentum of discussions initiated during the Indian Presidency and reinforce these initiatives.

Brazil's presidency of the G20 will be an opportunity to reiterate the urgency of policies that recognize the strategic role of family farming in the transition to sustainable, healthy, and inclusive food systems. Special attention will be granted to policies concerning women, youth, indigenous peoples and traditional communities, with an emphasis on the importance of promoting horizontal and mutually beneficial forms of international cooperation as a strategy to achieve the SDGs.

**Questions for discussion**

1. How can the G20 exchange best practices regarding promoting the participation of family farmers in different countries' food systems?

2. How can family farmers contribute to the transition towards sustainable, healthy, and inclusive food systems?

3. Which sustainable production systems have been successfully promoted by family farming, and how can the G20 support and promote them?

4. How can the G20 encourage logistics, connectivity, technical assistance, and agritech solutions tailored for family farmers?

6. How can the G20 AWG and the UN Decade of Family Farming agendas be integrated and generate positive synergies?

**EXPECTED OUTCOMES AND DELIVERABLES**

1) Recognize the central role of family farmers towards global food security.

2) Expand and integrate the G20 cooperation agenda with the actions of the UN Decade of Family Farming.

3) Promote the exchange of best practices on supporting family farmers to enhance the sustainability of their production systems and increase their participation across the different links of food systems.

4) Promote technology solutions, for example involving agritechs, that deal specifically with logistics, connectivity, technical assistance, and other aspects tailored to family farmers.

**Priority IV: Promote the sustainable integration of fisheries and aquaculture into local and global value chains**

*1. Aquatic food systems are fundamental to global food security and nutrition, an essential source of revenue and social inclusion for many countries.*

*2. Significant fish production expansion to meet the increasing global food demand will have to come from aquaculture.*

*3. Strengthen the implementation of international commitments related to fisheries, seeking to reduce market distortions and the overexploitation of aquatic resources and asymmetries between developed and developing countries.*

Aquatic food systems are fundamental to global food security. Fish is one of the most consumed and traded animal protein nourishing sources worldwide, accounting for around 17% of animal protein intake on the planet. For many countries it is an important source of revenue,

as well as playing an important role in generating income, employment and social inclusion, due to the general local, small producer model of business.

Global demand for fish will continue to grow. In order to meet this expansion, significant production increases will have to come from aquaculture, since the world's fish stocks are roughly at the limits of maximum sustainable exploitation, or even overfished.

In order to meet these challenges, several international commitments have gained momentum in recent years, such as: the Sustainable Development Goals - Agenda 2030, the Code of Conduct for Responsible Fisheries, the Agreement on Port State Measures (AMEP), the fight against illegal, unreported and unregulated fishing (IUU fishing), the Agreement on Fisheries Subsidies recently signed at the WTO, and the role of Regional Fisheries Management Organizations/Associations (RFMO/A). Several issues need deeper discussions and international cooperation, such as the sustainability of fish stocks, safe working conditions, climate change, aquatic genetic resources, reduction of loss and waste, environmental monitoring of aquaculture, plastic pollution, and blue bioeconomy, among many others.

The Brazilian G20 presidency will seek consensus to support the implementation of some of those commitments, under two fundamental pillars for Brazil: sustainability, reduction of market distortions and reduction of the overexploitation of fish resources caused by subsidies that are harmful to fisheries; and equity, for a fair distribution of catch quotas and opportunities for fisheries development, reducing asymmetries between developed and developing countries.

Another factor of great concern is climate change and the risk that it poses to aquatic biodiversity and therefore also to food security and people's livelihoods. Although humans have been developing varieties and breeds for more than 5000 years, there are relatively few distinct varieties of aquatic species. In capture fisheries, there are about 1800 species. Less than 700 species are farmed in aquaculture. At COP 26 in Glasgow, it was recognized that fisheries and aquaculture can increase their contributions to mitigating climate change, by growing proteins that emit little carbon or even sequester carbon from the atmosphere, as is the case with algae, mollusks, and other marine invertebrates. G20 can stimulate research and international cooperation on measures to reduce the loss of genetic resources while respecting fair and equitable access and benefit sharing.

In the last 60 years, human consumption of aquatic food has more than doubled, from 9.9 kg per capita to 20.5 kg per capita in 2019.[13] To meet this demand, fisheries and aquaculture production has reached a record 214 million tons in 2020. Of this, 51% came from capture fisheries and 49% from aquaculture. However, the remarkable level of production is concentrated in a few regions. Asia is responsible for 70% of aquatic animal production, with China, India, and Indonesia as the top three producers. In addition to production, international trade has also grown significantly. It is estimated that 36% of all fisheries and aquaculture production is traded between countries, reaching more than $150 billion in 2020.[14]

During its presidency of the G20, Brazil will bring to the center of the debates in the Agriculture WG the need to boost initiatives for better aquatic food systems management, under a global platform led by the FAO called Blue Transformation.

Launched by FAO in 2022, the Blue Transformation strategy is a platform that seeks to maximize the importance of aquatic food systems for food security, economic growth, social development, job creation and environmental recovery.

The Agriculture WG will work to give visibility to the three major objectives of Blue Transformation:

(1) Aquaculture: sustainable expansion and intensification to meet global demand for aquatic products, with equitable distribution of benefits;

(2) Fisheries: effective management will provide healthy fish stocks and ensure equitable livelihoods; and

(3) Value chains: more structured value chains will ensure the social, economic and environmental viability of aquatic food systems.

The aim of bringing these issues to the G20 Agriculture Working Group is to increase the visibility of fish value chains in the context of the food crisis and food inflation, to stimulate investment projects in the production of healthy food with the generation of income and employment, based on exchange and cooperation on good management practices, production and processing technologies and sustainability.

**Questions for discussion**

1. How does the G20 guide the role of sustainable aquaculture as an essential food source in the face of growing global demand?

2. How can the G20 exchange best practices on management, production and processing technologies, and sustainability in aquatic food systems?

3. How does the G20 support the FAO Blue Transformation Platform?

4. How does the G20 promote investment projects in the fish value chain, based on exchange on good management practices, production and processing technologies and sustainability?

**EXPECTED OUTCOMES AND DELIVERABLES**

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|---|
| 1) Increase awareness of aquatic food systems as a powerful solution for a sustainable food system. |
| 2) Exchange of best practices on management, production and processing technologies and sustainability of aquatic food systems. |
| 3) Support of FAO Blue Transformation. |
| 4) Seminar on aquatic food systems. |

## III. Way forward

| **Main Event Meetings** | **Organizer** | **Dates** | **Venue** |
|---|---|---|---|
| 1st Agriculture Deputies Meeting (ADM) | MAPA/MDA/MPA | 19 February 2024 | Virtual |
| 2nd ADM | MAPA/MDA/MPA | 29-30 April 2024 (TBC) | Brasília |
| Meeting of Agricultural Chief Scientists (MACS) | MAPA/MDA/MPA | 15-17 May 2024 | Brasília |
| 3rd ADM & G20 Agriculture Ministers Meeting (AMM) | MAPA/MDA/MPA | 10 - 11 / 12 - 13 September 2024 (TBC) | TBD |

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