

BRAZIL

National Pathways to Sustainable Food Systems

PART 1 (Introduction)

- 1) The United Nations Food Systems Summit (2021) represented a significant opportunity to promote sustainable food systems that ensure adequate and healthy nutrition for all. Sustainable food systems play a crucial role in economic growth, fighting hunger and poverty, fostering social inclusion, and protecting the environment. The way we produce, market, and consume food is critical for implementing the 2030 Agenda for Sustainable Development and achieving the future we desire.
- 2) For Brazil, efficient, sustainable, and resilient food systems are essential to guaranteeing the Human Right to Adequate Food (HRAF) and providing healthy and affordable food in sufficient quantities for the entire population. Over the past decades, the country has developed food systems that incorporate conventional agriculture, agroecology, and organic farming. Some key elements guiding this development include investments in science, technology, and innovation, promotion of family farming, attention to sustainability and resilience, as well as the pursuit of a more just, transparent, and equitable international agricultural trade system.
- 3) The increase in Brazilian agricultural and food production has been accompanied by a focus on enhanced sustainability, driven by the conviction that sustainable food systems can help tackle hunger and all forms of malnutrition while addressing climate change. For instance, the Sectoral Plan for Climate Change Adaptation and Low Carbon Emission in Agriculture (**Plano ABC+**) promotes the use of modern technologies and practices that reduce carbon emissions while supporting adaptation measures. Brazil views agriculture as part of the solution to address climate change and fulfill the targets of the Paris Agreement and the Kunming-Montreal Global Biodiversity Framework.
- 4) The Brazilian experience has also shown that promoting sustainable food systems can contribute to achieving the Sustainable Development Goals, including SDG 1 (poverty eradication), SDG 2 (zero hunger), SDG 7 (affordable and clean energy), SDG 8 (decent work and economic growth), and SDG 13 (climate action). For instance, the National Policy on Agroecology and Organic Production (**Pnapo**) brings together government actions that enable systemic engagement in food and nutrition security, the right to healthy food, the promotion of agrobiodiversity, and the

sustainable use of natural resources.

- 5) For Brazil, building sustainable food systems also includes, as an essential component, social protection initiatives and policies. The **Bolsa Família**, a conditional cash transfer program, plays a significant role in promoting food and nutrition security while contributing to the achievement of SDG 1 (poverty eradication) and SDG 10 (reduction of inequalities). Similarly, the National Program for Food Acquisition (**PAA**), which channels food produced by family farming to people experiencing food insecurity, and the National School Feeding Program (**PNAE**), providing healthy meals to over 40 million children daily, also contribute to expanding access to healthy food and strengthening sustainable food systems. It's worth noting that PNAE also supports sustainable development by incentivizing the purchase of diversified food produced locally, preferably by family farming and rural family entrepreneurs, prioritizing indigenous and *quilombola* communities. The program foresees a minimum acquisition of 30% of federal funds for family farming products, which in 2023 amounts to R\$ 1,638,572,189.00 (approximately USD 335,484,253.10 at the July 2023 exchange rate). Moreover, at least 75% of the resources must be allocated to the acquisition of fresh or minimally processed food, with a mandatory weekly supply of fresh fruits, vegetables, and legumes.
- 6) Brazil acknowledges numerous challenges to achieving greater sustainability in its food systems. In recent years, there has been a sharp increase in poverty, food insecurity, and social inequalities in the country. Data from the 2nd National Survey on Food Insecurity in the Context of the Covid-19 Pandemic (II VIGISAN) in 2022 revealed approximately 33 million people experiencing severe food insecurity, with over half of the population (58.7%) facing some degree of food insecurity. The FAO's State of Food Insecurity and Nutrition in the World (SOFI) report in 2022 also highlighted 15.4 million people in a situation of severe food insecurity and 61.3 million facing moderate or severe food insecurity. These figures emphasize regional, socioeconomic, racial, and gender disparities and exacerbate the vulnerability of traditional peoples and communities, who historically face a higher risk of food and nutrition insecurity.
- 7) The increase in hunger and food insecurity has impacted health and nutrition indicators, particularly among vulnerable populations. The deterioration of the population's dietary patterns negatively affects the multiple burdens of malnutrition in the country, including malnutrition prevalence, nutritional deficiencies, overweight, obesity, and Non-Communicable Diseases (NCDs), leading to increased costs for the Unified Health System (SUS). In recent years, Brazil has witnessed a significant

rise in the consumption of ultra-processed foods, linked to increased risks of obesity, hypertension, cardiovascular diseases, diabetes, and cancers. Data from the IBGE (Family Budget Survey - POF) indicates a 46% increase in the share of ultra-processed foods in the national diet between 2002-2003 and 2017-2018, reaching 18.4% of the population's caloric intake. The National Health Survey (PNS) in 2019 showed that 60.3% of Brazilian adults were overweight, of whom 25.9% were obese, while the National Study of Child Feeding and Nutrition (ENANI), also in 2019, showed that 3% of children under 5 years old had weight deficits, and 10% were overweight.

- 8) In addition to the increase in food and nutrition insecurity, the recent surge in international food and input prices, along with the Covid-19 pandemic and its impacts, highlights the urgent need to strengthen resilient food systems capable of ensuring food and nutrition sovereignty and security for the population, from production to consumption of adequate and healthy food, especially in times of crises and emergencies. This context also underscores the need to provide space for governmental action aimed at implementing public policies to improve food security in all its aspects, particularly food availability and access.
- 9) Many of the public policies and programs mentioned in this document, aimed at strengthening food and nutrition security and family farming, have achieved positive outcomes not only nationally but also in countries with which Brazil shares them through international development cooperation.
- 10) This document, produced in the first half of 2023, reflects a moment of significant political dynamism in Brazil. Food and nutrition security governance has been reinstated through actions that include (i) strengthening the National Food and Nutrition Security System, (ii) reestablishing the National Council on Food and Nutrition Security (CONSEA), (iii) resuming activities of the Interministerial Chamber on Food and Nutrition Security (CAISAN), with the participation of 24 ministries, (iv) developing a multisectoral and participatory Brazil Without Hunger Plan (**Plano Brasil Sem Fome**), (v) holding the 6th National Conference on Food and Nutrition Security in December 2023, and (vi) planning to launch a new National Food and Nutrition Security Plan in 2024. Other strategic actions, such as the launch of the Family Farming Safra Plan, the development of a National Food Supply Policy, and the definition of a new Brazilian basic food basket, considering health, sustainability, and food and nutrition security criteria, are also worth mentioning.
- 11) The following paragraphs present Brazil's current vision regarding the future of

national food systems and the proposed national pathways for the country to achieve the goals set out in the 2030 Agenda, particularly the goals concerning the reduction of poverty and the eradication of food and nutrition insecurity.

Part 2 (National Strategies)

1. Strengthening the national governance of food and nutrition security policies

As a result of intense social mobilization and political processes at the national and international levels, the Human Right to Adequate Food (HRAF), understood as regular and permanent access to quality, safe, and healthy food in sufficient quantities, was added in 2010 to the basic rights foreseen in the Brazilian Federal Constitution. Beyond the formal recognition of the centrality of food for human dignity and the deepening of democracy, the inclusion of the HRAF in the constitutional text materializes the understanding that it is the obligation of the Brazilian State to take necessary measures to guarantee and consolidate this right, including through the redesign of state structures, the adequacy of legal and legislative frameworks, and the implementation of public policies.

In this sense, Law No. 11,346, dated 15 Sep 2006, known as the Organic Law on Food and Nutrition Security (LOSAN), stands not only as an important precursor to the constitutional recognition of the HRAF but also as a milestone for interpreting this right and guiding actions for its realization, both by the State, as the bearer of obligations and guarantor of HRAF, and by individuals and collective rights holders, responsible for demanding and monitoring the implementation of this right.

The LOSAN reinforces the understanding that the realization of the Human Right to Adequate Food requires the active participation of rights holders, as well as intersectoral actions that articulate municipal, state, and federal spheres. To that end, it created the National Food and Nutrition Security System (SISAN), with key components such as the National Conference on Food and Nutrition Security, the National Council on Food and Nutrition Security (CONSEA), the Interministerial Chamber on Food and Nutrition Security (CAISAN), and their counterparts at the state and municipal levels.

CONSEA, which was dissolved by the previous government and reestablished in February, is responsible for advising and monitoring public policies related to food and nutrition security in Brazil at the federal level. The Council consists of two-thirds representatives from civil society, who work on a voluntary basis, and one-third government representatives. Also part of SISAN is the Interministerial Chamber on Food and Nutrition Security (CAISAN), composed of representatives from 24 federal government departments responsible for various aspects of food and nutrition security. CAISAN is responsible for developing the National Food and Nutrition Security Plan (PLANSAN) based on the National Policy on Food and Nutrition Security (PNSAN), indicating guidelines, goals, funding sources, and monitoring instruments regarding the

implementation of this policy.

Between 2006 and 2019, the operation of SISAN represented an important institutional innovation that provided the Brazilian government and civil society with a platform for joint action in formulating, implementing, and monitoring public policies to realize the HRAF. These policies not only allowed Brazil to leave the Hunger Map in 2014 but also transformed the country into a global reference in the fight against hunger and poverty.

Key Priorities towards 2030

- Reorganize SISAN, with special attention to the establishment of adequate processes and mechanisms to reach agreements at the federal level, including integrated management tools and continued co-financing, as well as defining parameters for the participation, protected from conflicts of interest, of civil society organizations and the private sector.
- Strengthen popular participation bodies, such as Conferences and Councils on Food and Nutrition Security at the municipal, state, and national levels.
- Resume and improve institutional instruments for the efficient governance of public policies and the collective and integrated management of the intersectoral food and nutrition security agenda, such as Intersectoral Chambers on Food and Nutrition Security at all three levels.
- Advance institutional mechanisms for inter-powers agreements aimed at demanding and promoting the fulfillment of the constitutional duties of the justice system and the National Congress in guaranteeing the Human Right to Adequate Food.

2. Fostering continuous and inclusive scientific research and innovation for the development of sustainable food systems and the promotion of adequate and healthy nutrition

The development and dissemination of technology, innovation, and good practices at all levels are crucial for promoting adequate and healthy nutrition and building sustainable, productive, prosperous, and resilient food systems. Investment in science and technology can significantly improve efficiency, productivity, and cost reduction in agriculture, thus contributing to strengthening food and nutrition security in its four dimensions: availability, access, utilization, and stability.

It is essential to develop and adopt new technologies and innovative tools, management practices, and standards to eradicate poverty, hunger, and all forms of

malnutrition, meet the growing global demand for adequate and healthy food, ensure life and well-being, promote responsible production and consumption, and address the challenges of climate change, among other goals (SDGs 1, 2, 3, 12, and 13).

Brazil has experience in integrating science and technology to build sustainable food systems adapted to the country's tropical and temperate climates and the characteristics of its six biomes. Partnerships between government officials, universities, public research institutions, civil society organizations, and the private sector, both nationally and internationally, have played a crucial role in driving innovation in all segments of the food system, from production to consumption.

Key Priorities towards 2030

- Support agricultural research and innovation developed by public and private institutions to meet the growing national and global demand for adequate and healthy food.
- Promote agricultural research and innovation focused on the development of the bioeconomy, including the production and dissemination of biological inputs. In this regard, strengthen, among other initiatives, the National Bioinputs Program, which allows for the development of standards and regulations for the operation of biological input production units, prioritizes small and medium biofactories, and promotes a favorable environment for infrastructure financing.
- Foster scientific research and innovation to promote the production of adequate and healthy food, through (i) technical support to all farmers, including family farming based on organic and agroecological principles; (ii) promotion of low-carbon agriculture and agricultural practices with a lower environmental impact; and (iii) diversification of production and appreciation of regional socio-biodiversity.
- Invest in research, development, and dissemination of sustainable technologies for the management of water, soil, and forests, combined with innovative practices for sustainable production.

3. Supporting the Development of Sustainable, Resilient, and Locally Adapted Food Systems

It is essential to recognize that countries and regions have distinct climates, soils, water resources, food habits, cultures, access to technology and levels of development, among other factors that shape food systems. Brazil believes that food systems, given their complex and diverse nature, should adapt to local circumstances and

characteristics to become more sustainable and resilient and to contribute more effectively to ensuring food and nutrition security.

Climate change and the increasingly frequent occurrence of extreme weather events represent a significant global challenge, as they negatively impact the stable supply of adequate and healthy food and create obstacles to the implementation of the 2030 Agenda. Public policies aimed at continuous innovation to reduce greenhouse gas emissions (GHGs) and facilitate adaptation to climate change are essential for promoting increasingly productive, diversified, resilient, and sustainable food systems.

Key Priorities towards 2030

- Implement measures for adapting to climate change and reducing GHG emissions in food systems.
- Strengthen and expand policies aimed at increasing the efficiency and resilience of production, such as the Sectoral Plan for Climate Change Adaptation and Low Carbon Emission in Agriculture (Plano ABC+), within the context of integrated landscape management.
- Expand and consolidate the National Policy on Agroecology and Organic Production (Pnapo), which articulates actions to promote the supply of organic and agroecological products, the sustainable use of natural resources, the valorization of agrobiodiversity and sociobiodiversity, the increased participation of rural youth, and the reduction of gender inequalities.
- Promote the conservation and restoration of native vegetation in rural areas through full implementation of the Forest Code. The Forest Code requires the conservation and recovery of native vegetation on rural properties, promoting sustainable solutions that combine food production with environmental conservation.
- Identify demands and potentialities of territories for the development of more resilient agriculture and the strengthening of food and nutrition security.
- Reinforce the norms and institutions of food safety and phytosanitary measures to provide access to adequate and healthy food for all and prevent the spread of pests and diseases among animals and plants.
- Implement and strengthen support for the income of vulnerable groups through institutional programs that simultaneously promote market access and foster more sustainable techniques for food production, processing, and marketing.
- Implement the National Food Supply Policy, encompassing actions related to sustainable production, distribution, and commercialization of adequate and healthy food and food services. In this context, direct specific actions to specific

population groups to ensure fair and equitable distribution of the resources and opportunities related to the production and access to adequate and healthy food.

4. Boosting the generation and use of renewable energy within food systems

The transition to clean and renewable energy is central to the effort of developing sustainable food systems and ensuring food and nutrition security in all its aspects. Brazil has one of the least carbon-intensive energy matrices among major economies in the world. Nearly 50% (48.4%) of the national energy supply comes from renewable sources, including sugarcane biomass, which accounts for 19.1% of the total renewable energy. Biodiesel, solar energy, wind energy, and other sources have also increased their share, currently accounting for 7.7% of the total.

In Brazil, food systems contribute to the production of biomass and biofuels. Energy production from agricultural inputs and animal waste, in addition to being clean and stable, helps strengthen agricultural production and distribution chains and reduces electricity prices. Biomass and biofuel production are complementary and integrated into various agricultural chains, such as sugarcane, soybean, and corn. This activity takes into account the so-called second harvest, generates co-products for animal feed, and does not threaten food production.

Additionally, experiences like the creation of the Social Biofuel Seal, which combines biodiesel production with the promotion of productive inclusion of family farmers, or specific lines of credit for family farming that stimulate the production of renewable energy from plant and animal matter, such as biodiesel and biogas, demonstrate the importance of actions that seek to integrate food production, renewable energy generation, and economic inclusion.

Based on the Brazilian experience, biomass and biofuels obtained from agricultural production and waste resulting from the process contribute to diversifying renewable energy sources (SDG 7), reducing rural poverty and food insecurity (SDGs 1 and 2), while promoting health and well-being (SDG 3). Additionally, they create jobs and income throughout the food system, allowing for regional resilience and local development (SDGs 1, 10, 12, 13).

Key Priorities towards 2030

- Increase the share of renewable energy in the national energy matrix and achieve the renewable energy targets adopted by Brazil under the Paris Agreement.
- Promote regional initiatives on renewable energy.
- Promote the integration of renewable energy into food systems, including

incentives for the production of biofuels from agricultural sources, as proposed by the RenovaBio program.

- Integrate policies aimed at producing adequate and healthy food with initiatives for the production of renewable energy from plant and animal organic matter, aiming to enhance the sustainability of the country's food systems.
- Create opportunities for the integration of family farming with policies promoting renewable energy, leveraging the experience of the Social Biofuel Seal and implementing promotion policies to increase the sustainability of food systems based on family farming.

5. Supporting smallholders and family farming in promoting sustainable livelihoods and food production diversification

Family farming plays a significant role in Brazil's food systems, representing 77% of rural establishments and occupying 23% of the country's agricultural areas. Besides being responsible for the diversity of food supply in the country, family farming has a crucial role in producing organic and agroecological foods, generating renewable energy, and developing a bioeconomy model that integrates traditional knowledge and promotes the productive inclusion of traditional peoples and communities.

Supporting and expanding the participation of family farming in sustainable food production is essential to strengthen food and nutrition security in all its aspects. To achieve this goal, it is essential to implement specific public policies that provide technical assistance, market access, financing, and value addition for family farmers in all their diversity, including smallholders, indigenous peoples, and traditional communities.

As part of a diversified agricultural structure, the National Program for Urban and Periurban Agriculture aims to promote agroecological food production in cities, seeking the sustainable use of available spaces such as vacant lots, backyards, roofs, and balconies. The program contributes to the food and nutrition security of the population by promoting sustainable production, processing, and marketing of healthy foods. Additionally, the program fosters local economic development, job creation, environmental education, and improved quality of life in cities by strengthening the link between urban communities and sustainable production of healthy food.

Small farmers and family farming, as well as urban and periurban production, can contribute to eradicating hunger and promoting health and well-being (SDGs 1, 2, 3), improving land and water use (SDGs 14, 15), building resilience, and fostering regional socio-economic development (SDGs 8, 10, 12, 13).

Key Priorities towards 2030

- Develop inter-ministerial public policies to promote sustainable food systems based on family farming, integrating diverse aspects of sustainability such as productive inclusion, agroecological and organic production, short supply chains, and market access.
- Implement intersectoral public policies to guarantee income to family farmers, such as public procurement programs like the Food Acquisition Program (PAA) and the National School Feeding Program (PNAE), which not only promote economic activity at the local level but also contribute to improving the food and nutrition security of students and beneficiaries of social programs.
- Expand the participation of family farming in national and international food systems through incentive public policies, including rural credit policies, public procurement, agricultural insurance, price guarantees, technical assistance, and innovation for sustainable production and agroecological transition.
- Improve land governance and promote agrarian reform based on national legislation and the constitutional precept of the social function of property, enabling the expansion of sustainable production of healthy food by family farming.
- Expand and strengthen the National Program for Urban and Periurban Agriculture, including the implementation of new facilities in cities.

6. Promoting greater integration of agrobiodiversity in food systems

Agrobiodiversity is recognized and valued by the Brazilian population, especially at the local and regional levels. It encompasses the variety of plants, animals, and microorganisms directly or indirectly relevant to agriculture and food. Agrobiodiversity has enormous potential to further contribute to the production of adequate and healthy foods, build resilience, and seek solutions adapted to different cultural and local circumstances. Therefore, it is essential to value and integrate it more effectively into the national food system.

To promote the use of agrobiodiversity and its integration into food systems, it is necessary to have supportive public policies and investment in science to drive research, innovation, and the dissemination of good practices related to agrobiodiversity. Moreover, it is crucial to develop socio-biodiversity products that value and incorporate family farming, small farmers, indigenous peoples, and local communities. This approach will significantly contribute to strengthening food and nutrition security, promoting

sustainability, and preserving natural resources.

Comprehensive and strategic integration of agrobiodiversity is essential to progress towards more sustainable food systems. Diversified agricultural and biological systems contribute to reducing hunger and poverty (SDGs 1, 2), promoting health and well-being (SDG 3), improving land and water use (SDGs 14, 15), building resilience and addressing climate change (SDG 13), and fostering regional socio-economic development (SDGs 8, 10, 12).

Key Priorities towards 2030

- Promote greater integration of agrobiodiversity in food systems by recognizing and valuing the products and traditional knowledge of traditional peoples and communities and supporting sustainable practices for the production and management of agrobiodiversity.
- Promote the sustainable use of biodiversity in all Brazilian biomes, supporting traditional peoples and communities and diversifying agricultural cultures and systems, including policies such as the Program for Bioeconomy Production Chains and the Policy of Minimum Prices for Sociobiodiversity Products (PGPM-Bio), which guarantees minimum prices for certain extractivist products.
- Include socio-biodiversity products in the National School Feeding Program (PNAE), valuing regional production and local agrobiodiversity, reclaiming traditional eating habits and food cultures, strengthening traditional communities, and diversifying food in schools, with a focus on food and nutrition security.
- Value agrobiodiversity and socio-biodiversity products, stimulating local experiences of use and conservation of plant and animal genetic resources. This includes recognizing and valuing local, traditional, or heirloom breeds and varieties and supporting sustainable management practices that preserve this genetic diversity.
- Improve mechanisms that allow a transparent and inclusive access to genetic resources and traditional knowledge related to agrobiodiversity, as well as fair and equitable benefit-sharing. In light of national and international legislation on genetic heritage management, it is crucial to ensure that benefits derived from the use of these resources are adequately shared, recognizing and appropriately rewarding the traditional communities and peoples that hold this knowledge and are the guardians of biological diversity.

7. Ensuring adequate and healthy food for all and promoting healthy food environments, particularly in cities

The Federal Constitution recognizes both the right to health and the right to food, establishing that the State is responsible for promoting public policies that guarantee food and nutrition security for the population. The promotion of adequate and healthy food is one of the guidelines of the **National Food and Nutrition Policy (PNAN)**. Its official recommendations are translated in the Food Guide for the Brazilian Population and the Food Guide for Brazilian Children under two years of age, internationally recognized for their innovative and comprehensive approach. The Brazilian Food Guides provide recommendations for adequate and healthy food considering the entire food production chain, from production, processing, and distribution to access and consumption, thus contributing to structuring healthier and more sustainable food systems. The Guides also stimulate reflection on the cultural and social aspects involved in eating, the sharing of meals, and the valorization of traditional Brazilian cuisine.

The Food Guides are essential tools for guiding national policies aimed at ensuring food and nutrition security and health of the population. Their recommendations underpin public policies focused on promoting both the right to health and the right to adequate food, in various areas such as health, nutrition, social assistance, agriculture, and the economy. By promoting adequate and healthy food, the Guides also help prevent health problems related to food and nutrition and contribute to the adoption of healthier lifestyles. Additionally, they play a relevant role in nutrition education for professionals and the general population.

Ensuring adequate and healthy food for all, in a country like Brazil, where over 80% of the population lives in urban areas, also involves attention to food environments in cities. It is necessary to promote food environments and strategies that enable urban populations to have access to adequate and healthy food throughout their lives. In this sense, an important challenge for the coming years is the implementation of an urban food and nutrition security agenda that organizes the availability of adequate and healthy food in cities and facilitates access to them by the population through intersectoral public policies and protective measures that make environments more conducive to adopting an adequate and healthy diet.

It is essential to highlight that certain social groups are more exposed to situations of vulnerability and inequity, making nutrition-related health problems particularly impactful for them. For this reason, appropriate policies must be implemented at the national, regional, and international levels to prioritize these groups and offer them the guarantee of a healthy and adequate diet.

The implementation of measures aimed at ensuring adequate and healthy food for all and promoting healthy food environments, particularly in cities, contributes to the achievement of SDGs 2 (zero hunger), SDG 3 (health and well-being), and SDG 11 (sustainable cities and communities).

Key Priorities towards 2030

- Disseminate the recommendations of the Food Guide for the Brazilian Population and the Food Guide for Brazilian Children under two years of age to the health sector and other sectors, including education, social assistance, and agriculture, especially regarding the promotion of the consumption of in natura or minimally processed foods and the reduction of ultra-processed food consumption.
- Ensure that government policies involving public food procurement remain aligned with national food and nutrition guidelines and contribute to ensuring adequate and healthy food for all.
- Promote and protect breastfeeding and adequate and healthy complementary feeding for children under two years of age, expanding and strengthening successful national strategies and seeking varied and intersectoral approaches, taking into account the fundamental importance of adequate and healthy nutrition in the early years of life.
- Implement actions to promote healthy food environments, particularly in cities, conducive to choosing adequate and healthy foods for the entire population, including through food regulatory measures. Measures such as (i) restricting food advertising, especially to children; (ii) evaluating and improving food labeling regulations; (iii) fiscal measures to encourage the consumption of adequate and healthy foods and restrict the consumption of ultra-processed foods, such as taxing sugary beverages; and (iv) regulating the sale and advertising of ultra-processed foods in schools may be considered in this regard.
- Structure an integrated urban food and nutrition security agenda.
- Prevent conflicts of interest in favor of health promotion and ensuring adequate and healthy food and nutrition security.
- Implement specific policies aimed at people and groups exposed to conditions of vulnerability, inequity, and violations of the human right to health and the Human Right to Adequate Food (HRAF), for whom nutritional problems have a greater impact.
- Ensure adequate and healthy food in situations of health crises and emergencies, taking into account that food donations and other food assistance actions should be based on the Food Guides and respect the culture and dietary habits of the

affected populations.

- Expand and strengthen food and nutrition surveillance, continuously monitoring the food and nutrition situation and its determinants at all stages of life through population surveys and collecting information in health services, to allow for the early identification of nutritional problems and timely interventions, as well as the planning of public policies and strategies for organizing care, nutritional attention, and population health at the federal and local levels.
- Strengthen the National School Feeding Program (PNAE) and provide, through school feeding programs, adequate and healthy food to students, promoting healthy eating habits and better learning and academic performance in children.
- Implement social technologies for access to water for individual consumption and agriculture.
- Strengthen and expand, through partnership between the health and economy sectors, research on food prices and their relationship with fiscal measures, as well as the impact of prices on food consumption and population health.

8. Reducing food waste and loss in the food system

Reducing food waste and loss throughout the food system is an essential measure with impacts on all four pillars of food and nutrition security. It is a relatively economical way to increase the supply of adequate and healthy food, tackle hunger and malnutrition, promote the health and well-being of the population, and reduce inequalities (SDGs 2, 3, 10). Moreover, preventing food waste and loss also contributes to addressing climate change and using natural resources more efficiently and sustainably (SDGs 12, 13, 14, 15).

To address this challenge, it is crucial to involve all stakeholders along the food supply chain, raising awareness about the importance of combating food waste and offering effective and concrete solutions. This effort requires behavior change, political commitment, and investment in new production processes, in line with SDGs 9 (Industry, Innovation, and Infrastructure) and 11 (Sustainable Cities and Communities). Measures focused on reducing food waste and loss can increase food availability in the market without raising production levels.

Public policies play a fundamental role in this process. Brazil has an **Intersectoral Strategy for Reducing Food Waste and Loss**, which establishes guidelines and priorities for promoting an integrated approach involving sustainable agricultural practices, efficient distribution and storage systems, as well as educating the population about the value of food and the impact of their choices. It is essential to note that the approach must be holistic, involving different sectors of society and taking into

account regional and local characteristics.

Key Priorities towards 2030

- Implement innovative policies and support research and development initiatives to reduce food waste and loss. Such policies and measures can lead to product and process innovations throughout the food production, supply, and consumption chain, and improve relationships among all segments of the food system.
- Establish nationwide awareness and education programs to inform the population about the impact of food waste and loss, highlighting the importance of responsible consumption, providing practical tips for food storage and preservation, and encouraging food donation to food banks and charitable institutions.
- Support family farming and incentivize the use of production, storage, and transportation techniques that contribute to reducing food waste and loss and increasing food availability in the market.
- Invest in improving food storage and transportation infrastructure, especially in rural and remote regions, including the construction and maintenance of silos, cold storage facilities, and proper refrigeration systems to minimize post-harvest losses, as well as improving distribution logistics, including roads and refrigerated transportation.
- Promote the creation of partnerships among different actors along the food supply chain, such as producers, retailers, NGOs, and government institutions, to promote information exchange, best practices, and collaboration to reduce food waste and loss. Additionally, establishing collaborative networks between different sectors can encourage the creation of innovative and sustainable solutions for food management at all stages of the production chain.

9. Integrating international trade negotiations with the promotion of food and nutrition security

International trade of agricultural products and food plays a strategic role in promoting food and nutrition security by allowing the supply and balance of food among countries. For Brazil, it is important that the international trade system and national food systems support each other to ensure the food and nutrition security of the population of Brazil and of our trading partners, according to each country's specific needs and challenges.

It is essential to overcome obstacles to international trade in agricultural products and food, such as distortive trade measures, and arbitrary disguised and unjustified restrictions. This includes mitigating distortive subsidies and adopting transparent and evidence-based sanitary and technical measures. By promoting a fair and balanced trade environment, Brazil can expand its food export opportunities, generating jobs and income in the agricultural sector and contributing to national and global food security.

It is important to emphasize that international trade negotiations must be conducted in a manner that protects and promotes the interests of family farmers and the diversity of Brazilian food systems. Trade liberalization must be accompanied by supportive policies and incentives for family farming, ensuring their fair and equitable participation in national and international markets. Furthermore, it is necessary to stimulate the protection of natural resources and the adoption of sustainable production practices, so that agricultural trade can contribute more effectively to the sustainable transformation of food systems.

A fair and balanced international trade system contributes to the achievement of different SDGs, including SDGs 1 (eradication of poverty), 2 (zero hunger), 9 (industry, innovation, and infrastructure), 10 (reduction of inequalities), and 17 (partnerships and means of implementation).

Key Priorities towards 2030

- Promote progress in international trade negotiations towards food and nutrition security as a common goal at the multilateral level, in the World Trade Organization, and on regional trade agreements, including efforts to prevent arbitrary and distorting trade actions that could harm food security and global food markets.
- Promote greater international market access for adequate and healthy foods that contribute to the food and nutrition security of populations, including by strengthening the image and competitiveness of Brazilian family farming products in the global market.
- Seek recognition of health security as an essential goal for food and nutrition security at the global level, advocating for the adoption of evidence-based international standards for sanitary measures related to international food trade and engaging in building international partnerships to promote regulatory harmonization and the exchange of information on health security.
- Reinforce the use of science as a basis for adopting sanitary and technical measures related to international food trade, promoting transparency and sharing scientific knowledge, as well as establishing evidence-based consultation and

review mechanisms. It is essential to avoid imposing arbitrary, disguised, and unjustified restrictions on international trade, ensuring that measures adopted are proportionate and based on real risks.