GLOBAL ALLIANCE FOR THE FUTURE OF FOOD

Submission by the Global Alliance for the Future of Food on the First Global Stocktake (GST)

About the Global Alliance

The Global Alliance for the Future of Food is a strategic alliance of philanthropic foundations working together and with others to transform global food systems now and for future generations. We believe in the urgency of transforming global food systems, and in the power of partnership to effect positive change. We combine systems thinking with collaborative action so that the ways we grow, process, distribute, consume, and waste food leads to a more resilient and equitable future for people, animals, and the planet. Our mission is to leverage our resources and networks to help transform food systems towards greater sustainability, security, and equity.

Executive summary and Key Messages

As a Non-Party stakeholder, we are responding to the first GST letter and guiding questions dated 18 July, 2022. This submission emphasizes the need for a food systems approach in national climate ambitions and Action Plans.

The global food system accounts for 31% of all anthropogenic greenhouse gas (GHG) emissions[1] and plays a critical role in climate change mitigation. These emissions arise from land use, storage, transporting, packaging, and processing commodities, as well as retail, food consumption, and food waste. Addressing food systems globally will be essential for meeting the 1.5°C target. In fact, even if all non-food GHG emissions were immediately stopped and were net zero from 2020 to 2100, emissions from food systems would still exceed the 1.5°C limit between 2051 and 2063[2].

However, modelling shows that well-designed supply-side measures to curb land-use change and the conversion of ecosystems, reduce agricultural emissions, and enhance soil carbon sinks could feasibly mitigate 8.5Gt CO2eq every year by 2050. In addition, demand-side measures promoting behavioural changes, such as reduced food waste and shifting diets, could mitigate 1.8 Gt CO2eq every year by 2050[3]. In total, changing the way we produce and consume food could reduce global GHG emissions by *at least* 10.3 Gt a year. This is a conservative estimate: the upper estimates from other modelling exercises show a greater potential for mitigation from food systems transformation. But even at this level, the impact is

[1] F.N. Tubiello, et al. "Pre- and Post-Production Processes Along Supply Chains Increasingly Dominate GHG Emissions from Agri-Food Systems Globally and in Most Countries," Earth Syst. Sci. Data Discuss [preprint]. Retrieved from: https://doi.org/10.5194/essd-2021-389, (2021).

[2] M.A. Clark, et al. "Global Food System Emissions Could Preclude Achieving the 1.5 and 2°C Climate Change Targets," *Science*, *370*(6517): 705–708.

[3] S. Roe, et al. "Contribution of the Land Sector to a 1.5°C World," *Nature Climate Change* (2019). Retrieved from: https://doi.org/10.1038/s41558-019-0591-9.

significant, equivalent to slightly more than the combined emissions from global transport and residential energy use in 2019[4].

The bottom line is that transformation of the industrialized food systems offers a huge opportunity to keep global warming below the critical threshold of 1.5°C, and it will be impossible to do so without it. Yet, based on the assessment of 14 Nationally Determined Contributions (NDCs), many countries worldwide have not realized the full potential of including food systems in their climate strategies and policies. There is an urgent need to center food systems transformation within climate change action. Nationally Determined Contributions (NDCs) are at the heart of the Paris Agreement and a strategic opportunity for governments to integrate a food systems approach across their climate policies and programs. Transforming food systems to respond to the climate emergency will simultaneously improve food security and nutrition.

The Global Alliance developed a suite of resources (toolkit) with the objective to 1) assist policymakers and other interested stakeholders in assessing how countries are performing in terms of integrating food systems transformation priorities into countries' NDCs; and 2) to serve as a guide for identifying and reflecting actionable measures and win–win opportunities for more sustainable food systems in future NDC revisions. The toolkit has five resources that can be considered as an integral component of the GST. We propose that Parties and other stakeholders should be encouraged to utilize these resources to adequately reflect a food systems approach in their future NDC revisions. The toolkit includes:

1. Untapped Opportunities for Climate Action: An Assessment of Food Systems in Nationally Determined Contributions, which provides an overview of the challenges and opportunities for promoting food systems transformation through NDCs, and includes the main findings stemming from the initial application of the Assessment Framework to the NDCs of 14 selected countries.
2. A Practical Guide to Assessing Nationally Determined Contributions, which contains an evaluation matrix and set of criteria to assess the extent to which a food systems approach is taken in developing and implementing NDCs.
3. Country Assessments, which present a preliminary and high-level application of the Assessment Framework for each selected country, providing an overview of food systems in the respective country, assessing the extent to which the most recently submitted NDC reflects a food systems approach, and outlining areas for improvement for future NDC cycles.
4. Case Studies, which are concrete examples of initiatives and success stories that integrate both food systems and climate change and/or directly support food systems transformations. Each of the 14 selected countries has a companion case study.
5. Technical Data Compilation, which presents the technical data compiled while filling out the Assessment Framework for each of the 14 selected countries. This document is available upon request.

[4] International Energy Agency, "Net Zero by 2050 – A Roadmap for the Global Energy Sector", (2021). Retrieved from https://iea.blob.core.windows.net/assets/4719e321-6d3d-41a2-bd6b-461ad2f850a8/NetZeroby2050-ARoadmapfortheGlobalEnergySector.pdf.

Response to Guiding Questions

Mitigation and Adaptation (Q1, Q2, Q4, Q5, Q6, Q8).

Although the food system accounts for 31% of all anthropogenic greenhouse gas (GHG) emissions and could feasibly mitigate 8.5Gt CO2eq every year by 2050; most of the Nationally Determined Contributions (NDCs) worldwide do not realize the full potential of including food systems in their climate strategies and policies. Majority of current NDCs are not adequate in achieving the adaptation and mitigation goals defined the Paris Agreement. They fall short of relevant food systems commitments and initiatives for climate mitigation and adaptation. Reducing the GHG emissions in the food system must become a priority if we are to achieve the global climate goals.

The GST and NDC updates present a valuable opportunity for countries to elevate climate ambitions by better integrating food systems into their NDCs. The Assessment Framework developed by the Global Alliance, presents several opportunities for policymakers and other stakeholders to reflect a food systems approach in future NDC revisions. These opportunities, framed as Priority Actions, are based on key findings from the individual Country Assessments and are separated into three categories: NDC preparation, content, and implementation. These Priority Actions can help countries improve food–climate governance aspects, expand climate actions beyond a narrow focus on agriculture, and better link supply- and demand-side interventions.

PRIORITY ACTIONS FOR THE NDC DEVELOPMENT PROCESS

Priority Action 1: Describe the NDC development process in a clear and transparent manner.
Priority Action 2: Engage all relevant food systems' stakeholders in the development of NDCs.
Priority Action 3: Ensure that holistic assessments of national food systems inform the development of NDCs.
Priority Action 4: Further improve cross-sectoral coordination in the development of NDCs.
Priority Action 5: Convene "citizens assemblies" and integrate insights into the development of NDCs.

PRIORITY ACTIONS FOR NDC CONTENT (TARGETS AND MEASURES)

Priority Action 1: Ensure alignment with food systems policies and agri-food support while removing contradictory or overlapping policy interactions.
Priority Action 2: Clearly recognize the various co-benefits of transforming food systems.
Priority Action 3: Account for emissions associated with food imports, including those related to deforestation and the conversion of ecosystems.
Priority Action 4: Include targets and measures to facilitate and accelerate the transition toward healthier and more sustainable diets.
Priority Action 5: Include targets and measures to reduce food loss and waste.
Priority Action 6: Include measures to promote a just transition by creating green food systems jobs and developing green food systems skills.

PRIORITY ACTIONS FOR NDC IMPLEMENTATION

Priority Action 1: Ensure engagement of all key stakeholders and ministries during NDC implementation and monitoring.

Priority Action 2: Address governance challenges to ensure effective implementation and monitoring.

Priority Action 3: Quantify the implementation costs for food systems measures and channel public and private finance accordingly.

Further actions that are required include:

- There is an opportunity for sustainable livestock production to be included more prominently in forthcoming NDCs given its significant climate and ecological footprint, especially by those countries that are major meat producers. The reforming of livestock production should appreciate contextually dependent factors such as the local ecosystem, livelihoods, and culture.
- NDCs should promote nutritious, whole-food diets underpinned by sustainable, diversified food production adapted to local ecosystems and sociocultural contexts as an essential climate mitigation strategy while delivering multiple health co-benefits. Countries should put forward appropriate demand side measures in their NDCs to reduce the consumption of animal protein and to shift diets toward plant-based proteins; and from processed to whole foods.
- Countries through their NDCs should fully account for emissions associated with food imports, particularly those related to deforestation and the conversion of ecosystems. Emissions associated with imported food products represent a considerable portion of a country's "attributable" GHG emissions yet are unaccounted for in policy or decision-making. Policy changes in relation to "offshoring emissions", tracking externalities, and accounting for the environmental, social, and health impacts of food systems policies and practices requires new mindsets, tools, and methodologies**.**

Q5c and Q10c What are the opportunities, good practices, lessons learned and success stories?

Food systems transformation at local and regional levels is already happening with positive climate, health, and socio-economic impacts, and this work needs to feature more deliberately in respective action plans. The Global Alliance documented Case Studies from diverse countries which serve as concrete examples of initiatives and success stories that integrate both food systems and climate change and/or directly support food systems transformations. These case studies also highlight diverse ways in which local, regional, and national food systems initiatives can contribute to climate action and other co-benefits, such as food security and health, thereby contributing to resilience, food sovereignty, and economic empowerment. They are evidence that transformative action can be taken, it is happening, and it must be accelerated.

Another good practice is that actions to protect, conserve, and recover natural ecosystems were commonly found in the NDCs we assessed. Majority of these NDCs promote agroecology, regenerative approaches, and nature-positive solutions, with Colombia and Kenya putting forward the most ambitious set of agroecological measures. This involved mostly forest protection, although conservation

of coastal ecosystems is mentioned in the NDCs of the United Kingdom, United States, Colombia, China, and Vanuatu.

Finance flows and means of implementation (Q11, Q12, Q14)

For finance flows to be consistent with low greenhouse gas emissions to achieve the Paris Agreement, public sector finance and fiscal policy must be redirected away from harmful food and farming practices — such as chemical-intensive agriculture, intensive livestock production, and the production of ultra-processed foods — and toward agroecology and regenerative approaches. This redirection is also an opportunity to support resilient livelihoods, and healthy communities; increase the production of healthy and sustainable food; as well as tackle climate change. When a policy environment incentivizes intensive farming practices, isolated non-governmental efforts to increase the production of healthy and sustainable food will be insufficient to shift the system.

NDCs should provide a clear commitment to move away from harmful subsidies with plans to promote sustainable production and consumption via greater investment in research, use of pricing instruments to incentivize alternative sources of protein, and actions to increase health and dietary literacy. In our assessment of the NDCs, we found that none of the assessed countries sufficiently addressed ineffective, inequitable, and harmful agri-food support public spending for NDC implementation. Also, none of the countries included concrete measures to redirect public resources, whether through subsidies or incentives, away from industrial chemical-dependent farming (which often only benefits large farmers) and toward more diverse, regionalized, agroecological, and regenerative approaches that can also support smallholders. Failing to revisit existing budgetary support for carbon-intensive commodities and cheap food can undermine the implementation of food systems targets in the NDC.

NDCs should adequately quantify the implementation costs for food systems measures and channel public and private finance accordingly. Although NDCs are underpinned by financial mechanisms to support their implementation, few countries explicitly quantify the costs associated with implementing their measures and achieving their targets. When implementation costs are not quantified, finance cannot be allocated in an informed manner, thereby slowing, or hampering the implementation of NDCs. Additionally, quantification of costs and specifying the methods used for calculation will help make food systems measures more tangible and will likely strengthen the implementation of current and future NDCs.

Climate finance for transforming food systems can be enhanced by government leadership that promotes collaboration across private, philanthropic, and multilateral investments. Making policy implementation costs and impacts fully visible in the NDCs can promote cross-sector action, avoid siloed or single focused interventions, and catalyse additional finance.

Social and economic impacts and Crosscutting Issues (Q16, Q18, Q19.Q21)

Based on our assessment, majority of the NDCs are spearheaded by the environment ministry and benefit from some level of cross-ministerial coordination, subnational engagement, and stakeholder participation. However, food systems actors tend to be overlooked in domestic consultation processes. Therefore, the NDC development process should be democratic and inclusive, involving not only

consultations with farmers, food manufacturers, and retailers, but also in-person consultations with local traditional communities, Indigenous Peoples, and gender experts. Climate Action processes and policy platforms should be built on transparency that enhance the participation of those working in food systems, who are most vulnerable to climate. Tackling asymmetries, structural inequities, and knowledge gaps in climate and food governance processes requires all food systems stakeholders to be engaged.

Furthermore, gender integration is a crucial aspect of equitable and participatory food systems and should be considered in designing and implementing effective climate adaptation interventions. Based on our assessment, there were significant differences in the extent to which the NDC development processes were deemed to be gender inclusive. For instance, Vanuatu and Canada fared considerably well in this respect, with every proposed measure being preceded by a gender assessment, or even linked to a gender expert. In Kenya, a dedicated gender analysis was undertaken to ensure that gender-responsive actions were identified, planned, budgeted for, and implemented as part of mainstreaming gender into the country's NDC. On the other hand, the United Kingdom has not gone beyond a very general reference to gender equality, and China and the United States failed to consider women as a particular stakeholder group in their NDC.

Additional Information

The ready-to-use detailed Assessment Framework can be accessed and downloaded in English, Español, Français, 中文, Deutsche. The Global Alliance will also be publishing a climate finance paper in November 2022. The paper is aimed at aligning public finance flows with the sustainable transformation of food systems, by (1) identifying public finance including climate and mainstream finance flows to the sector and the remaining finance gap, and (2) assessing the extent to which countries' updated climate pledges (NDCs) either commit national finance or call for international finance to support food system transformation. For more information on this submission, please contact patty@futureoffood.lorg or vivian@futureoffood.org.