

Submission by the Global Alliance for the Future of Food and Climate Focus 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.

About the Climate Focus

Climate Focus is an international advisory company committed to developing policies and projects that reduce greenhouse gas emissions, increase carbon sinks, and help us adapt to the consequences of a changing climate. We work with public and private sector actors in shaping and navigating international and domestic climate policies, accessing climate finance, and engaging with new climate mechanisms and cooperative approaches.

Executive summary and Key Messages

As a Non-Party stakeholder, we are responding to the GST [guiding questions](#). This submission emphasizes the need to increase climate finance to food systems and align financial flows with the Paris Agreement targets.

Global food systems are a significant driver of climate change and addressing them is critical for adaptation and mitigation. Even if we halt all non-food-systems-related emissions immediately, emissions from global food systems alone would likely exceed the emissions limit required to keep global warming below the 1.5°C target¹²³. At the same time, climate change is already affecting food security through higher temperatures, changing precipitation patterns, and more frequent extreme

¹ 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.

² 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>.

³ 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>.

weather events. Investing in food systems transformation is a cost-effective way for the climate finance community to achieve huge emissions reductions while simultaneously improving biodiversity, food security, and nutrition.

Yet, based on the [assessment](#) of public climate finance, global food systems receive just [3%](#) of climate finance despite contributing 33% of all greenhouse gas (GHG) emissions.⁴ These emissions arise from land use, storage, transporting, packaging, and processing commodities, as well as retail, food consumption, and food waste. Furthermore, 70% of current Nationally Determined Contributions (NDCs) lack adequate detail on the funding needs for climate action in food systems. Particularly, in developing countries' NDCs where the food systems priorities are underestimated and underfunded; this hinders the mobilization of appropriate climate finance. NDCs are at the heart of the Paris Agreement and an important mechanism to guide finance and investment into activities that align with climate goals. Governments have to include detailed food systems priorities and funding needs in their NDCs.

We need to urgently increase climate finance for food systems, while doing this, countries' domestic food and agricultural fiscal policies need to be coherent with climate goals. Based on our assessment, most public finance going to agricultural production are inconsistent with the cutting of GHG emissions. About 86.4% of the USD 611 billion spent annually has potential destructive impacts on climate, biodiversity, health, and food systems resilience.

We propose that parties should develop robust ambitious post-2025 climate action plans and climate finance targets that take a food systems approach. The Global Alliance and Climate Focus have developed a [suite of resources \(toolkit\)](#) and a [finance](#) report that provides recommendations and tangible frameworks for incorporating food systems into the NDCs and climate finance plans. The resources can be considered an integral component of the GST; Parties and other stakeholders should be encouraged to utilize them to adequately reflect a food systems approach in their future NDC revisions.

Response to the [Guiding Questions](#)

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

Although the food system accounts for 33% 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. The majority of current NDCs are not adequate in achieving the adaptation and mitigation goals defined in the Paris Agreement. They fall short of relevant food

⁴ 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).

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 global climate goals.

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

Among all the NDCs that we accessed, Colombia and Kenya are good examples of adequately integrating food systems measures and financing into NDCs. They included specifications of mitigation and adaptation measures that can be identified as food systems measure as well as funding needs for their implementation.

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

Governments through their 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.

Governments have an important role to play in ensuring that the finance flowing to food systems measures does not undermine climate objectives. About USD 528 billion per year in public money is channelled to the agricultural and food production practices with potentially destructive impacts on climate, environment, and human health. The majority of the finance was linked to farm output without constraints on the use of potentially harmful farm inputs and practices, such as synthetic (fossil-fuel based) herbicides, pesticides, and fertilizers. Less than 1% of finance provided to the agricultural producers is conditional on environmental welfare criteria.

Emissions-intensive and unhealthy commodities received the most fiscal support while fruits and vegetables are less supported overall. Sugar, beef, dairy, and rice are the commodities receiving the highest levels of public support worldwide – mostly delivered through market price support – despite their potential negative impacts on health and climate. Beef, dairy, and rice collectively account for 80% of global emissions from cultivation practices. The support has the dual effect of increasing the production of these commodities while creating disincentives to produce healthier, more nutritious, and culturally diverse foods.

For finance flows to be consistent with the Paris Agreement, governments should ensure that their NDC's include concrete measures to redirect public resources (whether through subsidies or incentives), away from harmful food and farming practices — such as chemical-intensive agriculture, intensive livestock production, and the production of ultra-processed foods — and toward more diverse, regionalized, agroecological, and regenerative approaches and practices. Failing to revisit existing budgetary support for carbon-intensive commodities and cheap food can undermine the climate action agenda. Also, the NDCs should include plans to finance sustainable production and

consumption via greater investment in research, the use of pricing instruments to incentivize diversified sources of proteins, and actions to increase health and dietary literacy.

Furthermore, Governments need to acknowledge that public finance, public policy and regulation significantly shape how private finance influences food systems. In the absence of regulation to make private finance coherent with climate goals, investments in the food and agriculture sector will continue to lead to negative environmental and social impacts through the production of agricultural commodities. Between 2015–2020, global meat and dairy companies received USD 478 billion from 2,500 investment firms, banks, and pension funds around the globe. Another study in the European Union found that investors channeled USD 70 billion between 2010–2015 to subsidiaries of 23 firms that had been linked to land grabbing and illegal deforestation in their production and trading of agricultural products. Therefore, government leadership is required to promote alignment across private, philanthropic, and multilateral investments.

Actionable Recommendations for Governments

1. Clearly identify food systems measures as a critical cross-cutting priority benefiting both adaptation and mitigation in Nationally Determined Contributions (NDCs). NDCs are used by donors and investors to ensure that finance provided is aligned with the priorities of the host country. They play an essential role in directing finance, but very few NDCs clearly mention planned measures for mitigation and adaptation in food systems. This makes it challenging for funders aiming to support food systems measures to identify activities in need of support that are in line with the host country's priorities. Outlining which activities fall within food systems and how they are aligned with national priorities in the country's NDC can help to better attract funding for these measures.
2. Include funding for food systems mitigation and adaptation in NDCs. Once food systems measures are identified in NDCs, a price tag should be attached to each activity. Quantifying the investment needed will help international funders get a clear picture of the level of commitment needed.
3. Include targets and indicators to measure how climate investments yield multiple benefits. Performance measurement is critically important for funder reporting. Metrics related to mitigation activities often take the form of emissions reductions achieved. Adaptation interventions lack such standardized, quantifiable outcomes. Adding a suite of health, social, and other environmental targets and indicators to NDCs will provide a fuller picture of the impact of mitigation and adaptation measures, including those related to food systems. This can help to attract international climate finance.
4. Redirect public finance and leverage private finance to food systems activities that align with NDCs. In many cases, existing finance stymies the achievement of climate goals and perpetuates other social and environmental crises. Policymakers must reform public support from business-as-usual agriculture. This can be done either by re-channelling mainstream agricultural support to other public goods and services aligned with climate targets by making investment conditional upon achieving environmental and social outcomes. Another option is to use public finance to de-risk investments that yield high social and environmental returns but have longer payback periods (such as many investments in climate resilience through food systems transformation).

5. Recognize and account for the true costs and benefits of investments in building sustainable national food systems. Climate action and finance are currently siloed in sectoral approaches that address mitigation and adaptation activities. This makes it challenging to identify food systems investments among other sectoral spending – and sometimes it's overlooked altogether. Policymakers should raise the profile of sustainable food systems in a way that best meets their national context to channel funding to holistic food systems policies and actions.
6. Create cross-sectoral linkages and mechanisms to ensure policy coherence across the government. A cross-sectoral government body that coordinates national priorities linked to food systems can ensure policy coherence in key ministries including climate, environment, health, and others. Coordination should also extend beyond the ministerial level and seek to engage regional and local authorities and the wider public through activities such as citizens' assemblies. The development of food systems policies must be shaped by people, communities, and their institutions. This process needs to be informed by diverse evidence, knowledge systems, and ways of thinking that uphold and value the interconnectedness between our food systems, health, and the planet.
7. Minimize externalities, trade-offs, and risks by aligning climate and food systems policies. Most of the finance supporting food systems is not aligned with climate goals and risks perpetuating other social and environmental crises. Care must be taken when developing and adjusting policies to ensure that the objectives of climate- and food-related policies are complementary and that any trade-offs are minimized. This includes putting processes in place to ensure that policy coherence is achieved and maintained over time.

Actionable Recommendations for Donors and Investors

1. Increase funding going to adaptation interventions in agriculture. Most finance is still directed to mitigation activities. Increasing the finance available for adaptation activities is especially relevant for countries in the Global South whose farmers lack access to the capital, savings, and insurance mechanisms that can safeguard against the shock of crop failures, livestock losses, and other risks caused by climate change. The provision of better indicators for measuring the impact of adaptation investments – as described in recommendations for governments – can also help provide financiers with the clarity they need to make and measure investment into adaptation activities.
2. Increase funding going to mitigation measures in food systems. Presently, most mitigation measures focus on supply-side activities such as agroecology, regenerative agriculture, and actions to conserve and restore ecosystems from the impacts of agriculture. Demand-side measures such as the promotion of dietary changes, tackling food waste, and emissions-reduction activities in food processing, storage, and transformation are rarely identified as Nationally Determined Contribution (NDC) priorities and, as a result, lack funding support. To tap into the mitigation potential of food systems, funding must be expanded to these other mitigation measures.
3. Assess funding and investment portfolios to minimize negative externalities and maximize social, economic, health, and environmental returns over time. This may include leveraging private finance to scale and fund local and national food and nutrition security, agroecology, and regenerative agricultural projects. For example, a small grants fund that is flexible and easy to access by locally led and innovative food systems initiatives can deliver multiple benefits to local communities.

We must move toward food systems that are focused on multiple benefits, including health, resilience, diversity, equity, inclusion, renewability, and interconnectivity. If we are to address the climate crisis and deliver on all Sustainable Development Goals, we must capitalize on the mitigation potential of our food systems and recognize the need to invest in climate resilience to cope with the impacts already being felt around the world. This demands not only new climate finance but also redirecting existing financial flows toward climate-aligned actions in food systems.

Additional Information

The Global Alliance climate finance paper '[Untapped Opportunities: Climate Financing for Food Systems Transformation](#)' can be assessed and downloaded in [English](#), [Español](#) and [Français](#). Also, the ready-to-use detailed NDC Assessment Framework can be accessed and downloaded in [English](#), [Español](#), [Français](#), [中文](#), [Deutsche](#). For more information on this submission, please contact patty@futureoffood.org, vivian@futureoffood.org and h.bakhtary@climatefocus.com.