

Joint submission: 2025 global dialogues of the Sharm el-Sheikh mitigation ambition and implementation work programme

January 2025

On behalf of the undersigned organizations, we welcome the opportunity to submit our views on topics under the Sharm el-Sheikh mitigation ambition and implementation work programme (MWP) global dialogues in 2025.

We propose that the MWP considers the topic **food systems**, encompassing the full value chain, from production through consumption and waste. This topic: (1) is recognised by UN agencies and leading climate-science authorities as critical for advancing mitigation as well as adaptation and sustainable development; (2) would greatly benefit from MWP dialogues to enhance support and navigate barriers; (3) intersects with a range of other mitigation priorities and is relevant to all Parties; and (4) would provide a unique opportunity in 2025, specifically, for MWP to build synergies with other workstreams under the UNFCCC.

1. Food systems are essential for mitigation while also advancing resilience and sustainable development.

Food systems account for one third of anthropogenic GHG emissions globally.¹ According to the IPCC Working Group III Report (2022), direct emissions from crop and livestock systems (agriculture) was 6.3 Gt CO₂-eq; that from land-use change, and forestry, including peatland drainage (land use) was 4.0 Gt CO₂-eq and that from processing, transport, storage, preparation, food waste (energy, industry, waste) was 6.5 Gt CO₂-eq. Furthermore, the share of energy, industrial process, and waste emissions occurring as part of the food system is the fastest growing source of emissions and has grown from ~28% in 1990 to ~38% in 2018.² The CGIAR-led Agriculture Breakthrough Report 2024 notes that “Global emissions from agrifood systems remained steady at around 16 gigatons of CO₂ equivalent between 2019 and 2021, indicating insufficient progress in reducing emissions” and that “making immediate and substantial reductions in these areas is crucial if the agricultural sector is to meet the global climate targets outlined in the Paris Agreement in 2015.”³ Mitigation in food systems is achievable, with the World Bank finding a cost-effective mitigation potential of over 14 Gt CO₂-eq a year,⁴ which could provide a significant portion of the reductions needed to meet the Paris Agreement's temperature goals.

Crucially, however, mitigation measures in food systems can simultaneously drive resilience and sustainable development as “most mitigation measures in the agrifood system also generate adaptation and resilience co-benefits.”⁵ The 2023 Global Sustainable Development Report identified sustainable food systems and healthy nutrition patterns as one of six entry points for accelerating progress towards the SDGs, while also typically highlighting measures with strong mitigation benefits.⁶

2. The MWP could provide a valuable opportunity for considering and addressing barriers to climate action on food systems.

A number of barriers have slowed progress for climate action on food systems including those relating to infrastructure, technological deployment, regulation, and policy and international collaboration.⁷ For example, food systems receive less than three percent of public climate finance.⁸ The MWP could examine such barriers, providing an opportunity to share experiences and highlight investment needs, available and innovative financial instruments, or areas for international cooperation.

3. Food systems is a topically inclusive framing, providing relevance to all Parties.

Food systems cut across a number of critical mitigation issues. These include: reducing non-CO₂ gases (food systems account for most methane and nitrous oxide emissions),⁹ ¹⁰ deforestation (food systems account for 80% of deforestation),¹¹ fossil fuels (food systems account for at least 15% of fossil fuel use),¹² and sustainable lifestyles (food accounts for nearly a third of household carbon footprints).¹³ There is also a rich variety of food systems solutions from production through consumption and waste. As a result, a discussion of

food systems under the MWP could be useful to Parties according to their priorities and needs. A food-systems framing allows for addressing core issues in the AFOLU or LULUCF sectors while being more inclusive—for example, by being more applicable to many island countries or those reliant on food imports. In this respect, it is worth noting that the agrifood sector currently employs approximately one third of the global labour force, i.e. an estimated 1.23 billion people worldwide,¹⁴ underscoring its significance for all Parties and its critical role in securing people’s livelihoods and building economic resilience. The food systems approach can also encompass a number of entry points for reducing GHG emissions without compromising food security. These pathways could be around reducing unsustainable consumption (e.g. encouraging dietary shifts to more plant based diets, or reducing overuse of fertilisers and water for farming); improving farm incomes and productivity through sustainable farming methods; reducing negative impacts on water, soil and ecosystems; and improving resilience of all producers, particularly smallholder producers.

4. In 2025, an MWP focus on food systems would provide synergies with other work under the UNFCCC.

Within UNFCCC processes in 2025, food systems will be discussed under the Sharm el-Sheikh Joint Work on the Implementation of Climate Action on Agriculture and Food Security (SJWA) and the Standing Committee on Finance (SCF). At SB 62, the SJWA will hold a workshop on the topic “Systemic and holistic approaches to implementation of climate action on agriculture, food systems and food security, understanding, cooperation and integration into plans.”¹⁵ MWP dialogues would give an opportunity to share solutions that operationalize this heightened focus on integrating food systems into plans, to connect the discussions happening under the SJWA with a broader group of stakeholders than are directly involved in the SJWA, and to identify interlinkages with mitigation financing. In September, the Standing Committee on Finance will host its 2025 forum, on the topic “Accelerating climate action and resilience through financing for sustainable food systems and agriculture”. Discussion of solutions and opportunities under the MWP could complement the structural focus of the SCF forum.¹⁶

Proposed subtopics

We encourage the MWP to adopt a whole-system approach, considering opportunities, barriers and solutions (including relating to policies and regulation, technology, and investment) across the entire food system value chain, with particular attention paid to unlocking the adaptation, environmental, social, health and economic co-benefits that food systems can offer. In line with this, we propose the following subtopics as important for consideration:

- **Reducing non-CO2 emissions:** As food systems account for the preponderance of methane and nitrous oxide solutions, they are critical to successfully reducing short-lived climate forcers. A discussion of this subtopic could examine solutions related to, for example: reducing methane emissions from rice, livestock, and organic waste; crop diversification; technology for capturing methane from landfills; and improving nitrogen use efficiency in fertilizer application.
- **Reducing deforestation and land degradation:** Food systems account for around 80% of deforestation and contribute to other forms of land degradation.¹⁷ A discussion of this topic could include opportunities for regenerative practices, nature-based solutions, and agricultural water management, as well as for policy integration across the Rio Conventions.
- **Improving diets:** Increasing healthy and sustainable diets offers tremendous mitigation opportunities while ensuring food security along with good health and nutrition. In many countries, there are also opportunities to shift to nutritious diets with lower environmental impacts.
- **Reducing food loss and waste:** Approximately 8-10 percent of GHG emissions are attributable to food loss and waste.¹⁸ A discussion of this topic could include opportunities to address this through, among other things, opportunities for investment, technology, or policy to help prevent pre-harvest losses, improve storage and distribution, and shift consumer behaviours.

- **Decarbonizing supply chains:** There are many opportunities to promote energy efficiency and renewables in the food system (which accounts for around 4 Gt CO₂-eq per year in energy-related emissions).¹⁹ Areas for discussion could include, for example, improving refrigeration (through efficiency and replacing hydrofluorocarbons) and promoting electrical cooking, both of which could provide health co-benefits.
- **Just transition:** The discussion could explore strategies to achieve a low-emissions pathway that prioritizes fairness, inclusivity, and equity for all stakeholders, with a particular focus on vulnerable groups such as smallholder farmers, Indigenous Peoples, women, and youth. Key areas of focus within this could include enhancing access to technology, finance, and capacity-building, and social safety nets, while also exploring opportunities for green jobs within sustainable food systems. The discussion should address social, cultural, and economic protections, emphasizing workforce development and livelihood support to ensure that no one is left behind.

Endorsing organizations (sign-ons received by Jan. 22, 2025, below; see complete list [here](#))

Africa Centre for Sustainable and Inclusive Development

Aquatic Life Institute

CGIAR

GAIN

Humane Society International

Mercy For Animals

ProVeg International

Real Food Systems Youth Network

The Save Movement

References

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- ⁸ Global Alliance for the Future of Food, “Untapped Opportunities: Climate Financing for Food Systems Transformation,” (2022), <https://futureoffood.org/wp-content/uploads/2022/10/climatefinancereport-english.pdf>.
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