



COP28 Policy Brief



**A 4-point Good Food For All Agenda for COP28:
Agriculture, Food Security and Nutrition must be
at the Heart of Climate Negotiations
#HungryforAction**

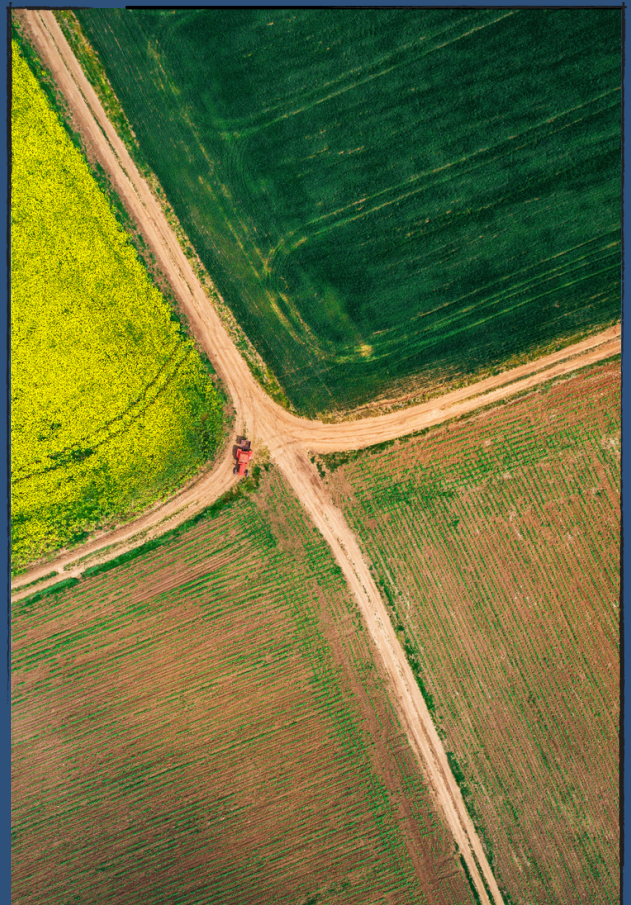
Introduction

This brief highlights the interlinkages between food security, nutrition and agriculture, loss and damage, adaptation and mitigation. It lifts up evidence-based agriculture and nutrition interventions for climate action that can save lives now, build resilience and secure the future, and lays out a four point plan for COP28.

With six years left to achieve the Sustainable Development Goals (SDGs) and scientists warning us that we are also running out of time to stay within planetary boundaries, the 28th session of the Conference of Parties (COP28) of the United Nations Framework Convention on Climate Change (UNFCCC) held in the United Arab Emirates from November 30 - December 12 could not be more pivotal.

The world is facing several overlapping crises. Of the 35 countries at greatest risk from the impacts of climate change, 27 of them already experience extreme food insecurity. Left unchecked, the climate crisis will further damage fragile food systems, as major crops yields decline by 40% due to drought, malnutrition assumes the leading cause of all climate-related child deaths by 2050, and heat waves push an additional 524.9 million people into moderate or severe food insecurity by 2041-2060.

Vulnerable populations lack the resources to adapt to a warming climate or access alternative sources of nutritious foods. Many are small-scale food producers reliant on predictable weather patterns and a healthy environment for their livelihoods and nutrition. Continued inaction risks lives and livelihoods.



Food System Transformation at COP28: The Opportunity

This year's COP will conclude the first-ever Global Stock-Take (GST), a process through which countries assess the overall progress on climate ambition. A key indicator of success at COP28 will be how countries agree to leverage and follow through on the GST findings. The findings of the GST Synthesis report are brutal. We are far behind on our ambition of limiting the rise of global temperatures below 1.5°C and urgency is required in mitigating emissions if we are to meet this ambitious target. The report also highlights a significant gap in climate finance between financing needs and what has been provided so far. On adaptation, for instance, UNEP estimates that the finance needs of developing countries are now 10-18 times higher than international public finance flows.

The intended purpose of the GST is to inform the next round of climate action plans (nationally determined contributions, or NDCs) under the Paris Agreement to be submitted by countries by 2025. Current agricultural practices and food systems make it impossible to limit warming to 1.5°C, even if all fossil fuel emissions were stopped. In addition, our food systems account for 15% of fossil fuel use. Reversal of progress on hunger and malnutrition as a result of climate change will put the SDGs further at risk. COP28 should agree on a framework to ensure that in the NDCs submitted ahead of COP30, countries integrate food security and nutrition to adapt, build resilience and transform food systems to deliver affordable, healthy diets while protecting the planet. Food systems – here defined as all the actors and processes involved in the growing, processing, transportation and consumption of food – have not received sufficient attention in climate negotiations compared to traditional topics of energy or nature, despite their great potential to accelerate the climate and development agendas. This COP promises to be different.

Under its presidency, the UAE has put food systems at the heart of COP28. It is calling on governments to sign the first-ever leaders-level Emirates Declaration on Sustainable Agriculture, Resilient Food Systems, Agriculture and Climate Action and committing to align national food systems and agriculture strategies with their NDCs, National Adaptation Plans (NAPs), and National Biodiversity Strategies and Action Plans (NBSAPs). The Leaders Declaration will be signed officially at the opening of COP28 and will lay the foundation for the meaningful inclusion of food systems into COP negotiations rooms and its final outcome document.

¹ [Action Against Hunger – Climate Change: A Hunger Crisis in the Making 2021](#)

² [Implications of climate change for agricultural productivity in the early twenty-first century](#)

³ [World Food Programme – Climate Crisis and Malnutrition: A case for acting now 2021](#)

⁴ [The 2023 report of the Lancet Countdown on health and climate change: the imperative for a health-centred response in a world facing irreversible harms](#)

⁵ [UNFCCC – Views on the elements for the consideration of outputs component of the first global stocktake: Synthesis report by secretariat, 2023](#)

Why is this Critical?

Agriculture faces distinct and complex challenges in the context of climate change. Due to its dependence on weather and climatic conditions, agriculture is particularly vulnerable to extreme weather events that have now become common. The sector is already experiencing negative impacts from rising temperatures, more variable rainfall and invasive pests, among other impacts, that will push affordable healthy diets further out of reach. Furthermore, current production and consumption patterns are a major source of global greenhouse gas (GHG) emissions, both directly (through on-farm emissions linked to overproduction of animal-sourced foods) and indirectly (through land use change due to agricultural expansion).

In the current era of food crises being the “new normal”, food systems cannot be ignored and rural communities must not be left behind. Urgent action is needed by all stakeholders. Low income countries need far greater support (finance and technology) to achieve a 1.5°C world, to manage and prevent loss and damage, to adapt to a warming world and mitigate the worst impacts of climate change.



⁶ [UNEP Adaptation Gap Report 2023](#)

⁷ [Global food system emissions could preclude achieving the 1.5° and 2°C climate change targets](#)

⁸ [Food systems account for at least 15% of fossil fuels](#)

⁹ [COP28 Calls on Governments to ensure Food Systems and Agriculture are central to Climate Action Efforts](#)

What COP28 should Deliver for Food Systems:

- Operationalise the Loss and Damage Fund, integrate food security and nutrition, and ensure the timely and effective flow of funds. Developing countries have contributed the least to the climate crisis. Rural, frontline communities are being buffeted by the impacts of climate change. Stepping up support for loss and damage, especially for the most vulnerable communities, will prevent further backsliding and protect hardfought gains on hunger, malnutrition and extreme poverty.
- Prioritise adaptation and ensure that it receives 50% of climate financing as recommended by COP26 in Glasgow. Transformative adaptation would build resilience in vulnerable communities and accelerate progress towards the SDGs. COP28 must make meaningful progress on an ambitious global goal on adaptation with specific targets and indicators on sustainable agricultural practices, smallholder livelihoods, biodiversity, food security and nutrition, and financing commensurate with the latest estimates.
- Step up mitigation efforts to reduce greenhouse gas emissions from food systems and halt biodiversity loss. Sustainable, equitable food system transformation is essential to ensuring that SDG2 targets are achieved by 2030 and delivering good food for all without breaching the 1.5° threshold.
- Commit sufficient financing. We cannot afford further delays in delivering the financial commitment made in the Paris Agreement. Because of the failure to mitigate climate change and to deliver climate financing at scale, the latest estimates and costs are exponentially higher. COP28 must drive progress in aligning and leveraging various financing mechanisms to make available grant funding, rather than loans, for loss and damage, adaptation and mitigation as well as help solve the debt crisis as most low-income countries cannot fix the climate issue without fixing the debt issue.



¹⁰ [Adapt now: a global call for leadership on climate resilience](#)

¹¹ [Transformative adaptation to climate change for sustainable social-ecological systems](#)

¹² [If You Want our Countries to Address Climate Change, First Pause Our Debts](#)

Bridging Climate and Food Systems

The section below goes deeper on the issues of loss and damage, adaptation, and mitigation to examine their intersections with agriculture and nutrition as well as identify recommendations for joint action.

Address Loss and Damage to Save Lives and Livelihoods Now

'55 most Climate-Vulnerable economies alone have already experienced losses and damages of more than US\$500 billion in the last 2 decades.'

– 2023 Adaptation GAP Report by United Nations Environmental Programme

The loss and damage to agriculture, food security, and nutrition caused by climate change is unimaginable. By one measure, the world lost an estimated \$3.8 trillion of crops and livestock production due to climate shocks in the last three decades, a figure that FAO notes is likely an underestimate due to insufficient data to analyse damages to aquaculture, fisheries and forestry. As climate change worsens, the two principal causes of damage to agriculture – water supply and extreme temperatures – will also worsen.

Lost crops and livestock have cascading effects for the incomes and livelihoods of smallholders and food system actors across the value chain as well as food and nutrition security outcomes. Rising rates of wasting and stunting combined with increasingly inaccessible and unaffordable healthy diets have long-term consequences for the health and development of people and economies around the world.

Going beyond food systems, it is important to note that climate extremes disrupt access to safe water and to health systems that are critical for good nutrition. Climate disasters that damage health infrastructure hinder accessibility and availability of essential nutrition services for a population. In short, the way we think about loss and damage must be broadened to include the impact of climate-related shocks on “grey matter” or human infrastructure – nutrition, health and wellbeing, and livelihoods.



¹³ [UNEP Adaptation Gap Report 2023](#)

¹⁴ [FAO – The Impact of Disasters on Agriculture and Food Security](#)

Recommendations:

- Provide sufficient financing for and operationalise the Loss and Damage Fund.
- Ensure loss and damage discussions prioritise food security, nutrition and smallholder agriculture:
 - Ensure that smallholder farmers have direct access to loss and damage funds to minimise and prevent loss of livelihoods.
 - Strengthen or expand shock-responsive social protection systems that support rural communities in the wake of a shock as well as respond to long-term climate impacts, such as droughts, that affect agricultural productivity and food and nutrition security.
 - Scale up nutrition-specific and sensitive interventions (ready to use therapeutic foods, cash assistance, essential nutrition care) to protect nutrition outcomes.
- Invest in data systems that identify communities most vulnerable to climate impacts and malnutrition, improving preparation efforts and minimising loss and damage.
- Commit to anticipatory actions to preposition nutrition and livelihood assistance to strengthen communities' resilience before a shock occurs



Adaptation to Build Resilience

The need for agriculture and food systems to adapt to a warming planet is clear. What is lacking is the financing and technical capacity to effectively adapt. The impact of climate change accounts for a 20% decrease in agricultural productivity globally since 1961 while as many as 735 million people were hungry and 1 in 3 malnourished in 2022. On the frontlines, smallholder farmers lack the critical tools needed to adapt with negative consequences for people and the planet. For example, rising temperatures, water scarcity, and diseases are affecting crop yields the world over, as evidenced by a 15% reduction in wheat yields in 2022 in parts of South Asia. About 95% of Africa's food production is rainfed while 921 million additional people in Sub-Saharan Africa will be water stressed by 2050. Adaptation solutions – such as adopting heat-resistant and drought-tolerant seeds, expanding information systems that track weather patterns and predict yields, and establishing irrigation systems for efficient water usage – are vital to ensure we can continue to grow food on a warming planet. Without such adaptations, farmers may revert to negative coping strategies that exacerbate climate impacts, as seen by the increased reliance on fossil-fuel based fertilisers to grow crops in poor quality soil that not only risks the quality of our food and contributes to poor nutrition outcomes but also drives up fertiliser production that emits 1.4% of yearly CO₂ emissions.

With the right investments and policies, agriculture, food security, and nutrition can contribute to transformative adaptation and build climate resilience. Developed over thousands of years, Indigenous and local knowledge of production and environmental management practices must be recognised as a critical solution and Indigenous communities actively engaged. Smallholder farmers can play a vital role in the diversification of food production to replenish soils, boost biodiversity, safeguard the environment and shift consumption patterns for a healthier population. And yet, less than 1.7% of total climate finance went to small-scale agriculture in 2020, despite smallholders facing the brunt of climate impacts and women-led households less likely to adapt.

Recommendations:

- Keep promises on existing commitments and agree to new adaptation finance: at this COP28, an agreement must be reached to increase climate finance to the current realities. The undelivered \$100 billion pledge reached at COP15 isn't even close to meeting current needs. UNEP's Adaptation GAP Report 2023 estimates that developing countries need between \$215–387 billion per year to adapt to climate change.
- Define smallholder agriculture, food security and nutrition targets and indicators in the Global Goal on Adaptation.

- Support farmer organisations and cooperatives: dedicate a portion of adaptation finance to directly support smallholder farmers, including women and youth.
- Invest in the evidence-based cost-effective interventions identified by Ceres2030, to build resilience, boost farmers' incomes and improve access to resources and training, especially women farmers.
- Invest in and expand the reach and coverage of weather forecasting and early warning systems.
- Support the adoption of climate-resilient, biofortified and indigenous crops that are more nutritious, productive and better adapted to excessive heat and water scarcity and other climate impacts, to prevent malnutrition and promote healthy diets with a lower climate footprint.
- Invest in research in food, water and land systems, through CGIAR and initiatives such as The Vision for Adapted Crops and Soils (VACS) to improve soil health, resilient seeds, and facilitate the transfer of knowledge, technology and innovation to Indigenous, women and smallholder farmers.



¹⁵ [Adapt now: a global call for leadership on climate resilience](#)

¹⁶ [Anthropogenic climate change has slowed global agricultural productivity growth](#)

¹⁷ [The State of Food Security and Nutrition in the World 2023](#)

¹⁸ [CGIAR – Hot, dry climates call for resilient, high-performing wheat varieties](#)

¹⁹ [NEPAD – Improving Food Security In Africa through Water Harvesting Technologies](#)

²⁰ [Climate change risks to human development in sub-Saharan Africa: a review of the literature](#)

²¹ [2020 Global Nutrition Report](#)

²² [Carbon Brief's Q&A: What does the world's reliance on fertilisers mean for climate change?](#)

²³ [Indigenous knowledge is key to sustainable food systems; Traditional Knowledge, Innovation and Practices](#)

Mitigation to Secure the Future

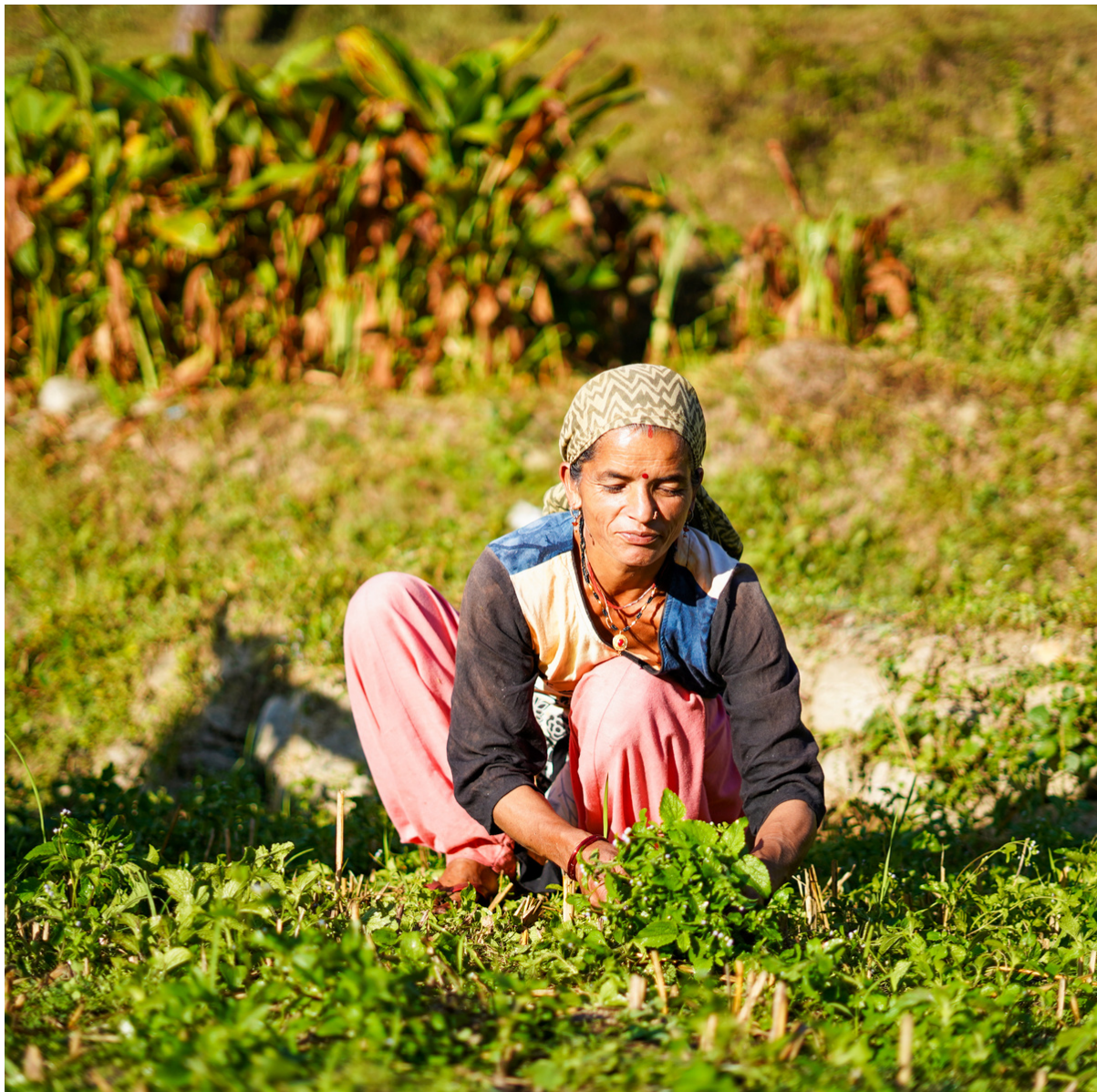
Current food systems contribute an estimated one-third of all greenhouse gas emissions, largely driven by unsustainable agriculture practices such as deforestation for increased farmland, excessive use of harmful fertilisers by large-scale agriculture, the resource-intensive livestock industry and a reliance on fossil fuels for the transportation of food. Agriculture subsidies have contributed to the current system and driven a dependence on a limited number of crops including maize, wheat, soy and rice over nutritious foods that make up diversified healthy diets, such as fruit, vegetables, beans and pulses, with negative outcomes for both people and planet. We consume insufficiently diverse diets in which 60% of the calories are from three crops, healthy diets remain unaffordable to many and 60% of biodiversity loss is connected to production and consumption practices. Mitigation plans and policies must leverage the food systems transformation to achieve positive agriculture, nutrition and climate outcomes.

Recommendations:

- Repurpose agriculture and fossil fuel subsidies towards positive outcomes for people and the planet. The World Bank notes that a 40% reduction in emissions from agriculture could be achieved if just a portion of government agricultural support is repurposed.
- Take steps to integrate climate, agriculture and food systems actions into critical climate frameworks like NDCs. New research by I-CAN finds that 60% of the analysed NDCs show no intentional integration of nutrition-related actions.
- Invest in value chain solutions (from cold storage to improved packaging) to reduce post-harvest food losses and lessen the volume of agriculture inputs while also boosting farmer's incomes and increasing the availability and affordability of food for better nutrition outcomes.



- Support to smallholder farmers, particularly female farmers, to scale up sustainable agricultural production techniques that replenish the soil and boost biodiversity could reduce the need for land expansion.
- Ensure the integration of fossil fuel alternatives in fertiliser production and food transportation of food to lower levels of CO2 emissions.
- Reduce food waste, especially in high income countries, by expanding data systems that identify where and why it is occurring and measure the true cost of food waste, and scaling up public interventions (policies and infrastructure) to create an enabling environment to facilitate multi-stakeholder efforts.



²⁴ [IFAD and Climate Policy Initiative – Examining the climate finance gap for small-scale agriculture](#)

²⁵ [UNEP Adaptation Gap Report 2023](#)

²⁶ [Ceres2030: Sustainable Solutions to End Hunger](#)

²⁷ [Food systems are responsible for a third of global anthropogenic GHG emissions](#)

Aligning Financing for Transformational Impact

Accelerating action on the climate and development agendas requires sufficient financing at local, national and global levels. Public financing remains the most important source of financing, especially for vulnerable communities. In addition to existing financing commitments made on loss and damage, adaptation and mitigation, there are several new financing mechanisms and opportunities:

- In December, France will host the final meeting of the International Fund for Agricultural Development's (IFAD) 13th Replenishment. Recognizing the role that IFAD plays in building climate resilience among smallholder farmers, rural women and youth and Indigenous Peoples, a number of countries have already made commitments to increase their contributions for IFAD 13 ahead of the Paris meeting. A strong outcome will provide an important source of financing for food systems transformation among some of the most climate vulnerable countries.
- Experts are calling for an ambitious tripling of the International Development Association (IDA), the World Bank's concessional lending arm to low-income countries, by 2030 in order to help countries achieve both sustainable development and tackle the climate crisis. Mobilising funds for the period 2024-2026, the upcoming IDA21 Replenishment would total an estimated \$186 billion if tripled or \$139.5 billion if doubled.
- Most developing countries are struggling with debt. They should not be further overburdened by 'climate debt'. Debt servicing is absorbing as much as 40% of government spending on the African continent, outweighing total combined spending of education, health, social protection and climate. Debt relief measures are urgently needed to create the fiscal space for countries to use their domestic financing to respond to climate disasters as well as invest in long-term climate and development solutions.
- To move the scale of financing from billions to trillions, the reform of Multi-Development Banks is critical to unlock additional funding from their balance sheets for climate and development solutions.
- Reallocation of Special Drawing Rights (SDRs): In August 2021, the IMF issued an unprecedented allocation of SDRs – a reserve asset which can be traded for hard currency to provide much needed financing in times of crisis and without taking on additional debt. The allocation was based on IMF quotas, so high income countries received the lion share. In October 2021, the G20 pledged to reallocate \$100 billion of their SDRs to low-income countries. Only \$87 billion have been reallocated and mostly through two IMF trust funds – the Poverty Reduction and Growth Trust Fund and the Resilience and Sustainability Trust Fund and because of the way the mechanisms work, only \$702 million has reached vulnerable countries.

- Blended finance instruments using concessional financing from donors and philanthropies could mobilise much needed investment from development finance institutions and the private sector for climate and food systems projects that reach vulnerable rural communities.

Recommendations:

- In light of the polycrisis, to ensure the poorest countries have sufficient resources for mitigation, adaptation and to address loss and damage, and accelerate progress towards the Sustainable Development Goals, it is critical to align, leverage and diversify sources of financing, as noted above, to ensure more and better finance.
- Increase public finance for climate mitigation, adaptation and loss and damage.
- Climate finance should be delivered in the form of grants and not loans. Developed countries must commit to increase the provision of climate finance through grants to reduce the debt burden on developing countries.
- Ensure that smallholder farmers and frontline communities have direct access to climate finance for loss and damage, adaptation and mitigation.
- Agree on new debt relief clauses that would pause debt and interest repayments during and after climate shocks or a 10 year grace period as proposed by the African Union.



²⁸ [Crop Trust – Seeds: ‘Low Hanging Fruit’ for Food Security](#)
²⁹ [WWF – It’s time to fix our food system](#)
³⁰ [World Bank – Repurposing Agricultural Policies and Support](#)
³¹ [Accelerating Action and Opening Opportunities: A Closer Integration of Climate and Nutrition – 2023 I-CAN Baseline Assessment](#)
³² [The State of Food and Agriculture Report 2019](#)
³³ [Oxfam Climate Finance Report](#)
³⁴ [CGD – IDA and MDB Reform: The Case for Greater Ambition](#)
³⁵ [Debt Service Watch – The Worst Ever Global Debt Crisis](#)
³⁶ [CGD – Empty Words, Empty Wallets: The G20’s Broken Promise on SDR Recycling](#)
³⁷ [Unleashing the catalytic power of donor financing to achieve SDG2](#)

Conclusion

September 2023 was estimated to be 1.75 degrees warmer than the pre-industrial period, well above the safe 1.5°C window. Expectations for this year's COP28 are high – not only to deliver on the mitigation agenda but also to agree a Global Goal for Adaptation and see progress on the Loss and Damage Fund. As countries implement commitments made at COP28, it is critical to include measurable food-systems targets and indicators within their NDCs. With the urgency to act, we no longer have the time to deal with one crisis or challenge at a time. Agriculture, food security, and nutrition must be recognized as transformational and catalytic investments in climate negotiations, to accelerate progress towards the Paris Agreement and the Sustainable Development Agenda.

The delivery of this vision – through research, policies, programming and financing – must be inclusive and responsive to the priorities and concerns of the most vulnerable communities, drawing on local knowledge and solutions identified by affected populations. Women, youth, Indigenous and rural people, smallholder farmers and climate-vulnerable communities must be front and centre at COP climate discussions with a voice at the decision making table. In anticipation of the climate summit, diverse stakeholders are mobilising new evidence and outlining priorities and commitments to an integrated food and climate agenda, including the Non-State Actors Call to Action: Transforming Food Systems for People, Nature, and Climate.

There is a lot at stake at COP28 and progress, of course, will depend on the level of ambition and accountability from all stakeholders to deliver on existing and new commitments. With time running out, the world must bring together the climate and development agendas to accelerate action on many fronts for the future of people and the planet, while leaving no one behind. Agriculture, nutrition and food systems transformation hold the key.



³⁸ [African Leaders Nairobi Declaration](#)

³⁹ [Hottest September on Record](#)

⁴⁰ [Non-State Actors Call to Action: Transforming Food Systems for People, Nature, and Climate](#)