

INTRODUCTION

It is estimated that around 828 million people worldwide do not have enough to eat – a number that continued to rise during 2022. There are many reasons for this: increasing conflicts, including the war in Ukraine; global inequalities; and the lack of access to essential rights and services such as water and health. One of the biggest drivers of hunger, however, is extreme weather resulting from climate change. Today, 27 of the 35 countries most affected by climate change are experiencing extreme food insecurity. By 2050, an additional 8 to 80 million people could face hunger, particularly in sub-Saharan Africa, South Asia and Central America.

We ask the political and economic leaders at COP27 to acknowledge the interconnectedness of a healthy planet to the human right to food, and to take responsibility for the food and nutrition security of current and future generations. Limiting global warming to 1.5° Celsius by immediately ending the use of fossil fuels is the most important step. However, the commitments in the Paris Agreement go further than that. They require governments to "[increase] the ability to adapt to the adverse impacts of climate change and foster climate resilience [...] in a manner that does not threaten food production".

The following urgent actions need to be taken to put this into practice:

CHAMPION LOCALLY LED ADAPTATION

- Funding for adaptation must be made directly available to local communities, civil society organisations and grassroots groups, and the proportion they receive must be tracked. Currently, small-scale farmers produce one third of the world's food, but receive only 1.7 per cent of climate finance,⁴ though they count among the people most vulnerable to climate change.
- Localised and contextualised solutions and best practices need to be developed by and shared among affected
 populations and other key stakeholders. Effective adaptation requires local knowledge and Indigenous wisdom.
 One-size-fits-all approaches are never adequate.
- All adaptation and mitigation initiatives must take into account the food and nutrition security of vulnerable
 local populations and their access to land. Short-term solutions that lead to maladaptation must be avoided.
 Instead, the most vulnerable communities must play a leading role in adaptation and mitigation initiatives
 so they can maintain their food and nutrition security and their adaptive capacity without having to resort to
 negative coping mechanisms.
- Women and girls are more likely to suffer from the adverse effects of climate change. Adaptation efforts should therefore systematically and effectively address gender-specific impacts of climate change, e.g. by ensuring female farmers have access to land, credit, training and agricultural inputs tailored to their needs and priorities. A gender audit for adaptation projects can be one way to achieve this.

PROMOTE TRANSFORMATIVE AGRICULTURAL ADAPTATION (AGROECOLOGY)

• A stable supply of nutritious and affordable food in a changing climate will not be possible without transformative and locally led agricultural adaptation. Governments and donors should invest in agroecology to ensure long-term food and nutrition security and to enhance the climate resilience of communities. Agroecology is a highly effective adaptation strategy that benefits human health and biodiversity, allows farmers to retain more of their income, and specifically benefits smallholder and women farmers by decreasing their reliance on external inputs and value chains. It also avoids emissions associated with the production and application of synthetic nitrogen fertilisers, the prices of which skyrocketed as a result of the war in Ukraine and other factors.

HOW ACTION AGAINST HUNGER HELPS COMMUNITIES ADAPT HOLISTICALLY

Cultivating rice in flooded fields – agricultural adaptation in South Sudan

Parts of the Paguir region of South Sudan are repeatedly flooded as a result of climate change, making it very difficult for local communities to grow their traditional crops as they used to. Action Against Hunger, together with local communities, is taking advantage of the new weather patterns to grow rice. Rice is not a traditional cereal in this area of South Sudan, but it grows very well in flooded areas. Action Against Hunger supports the farmers in dividing up rice fields with clay levees and accompanies them from sowing to harvesting. No large machines are needed to grow or harvest the rice, making the project low-cost and sustainable. As a result, the community can better feed itself, and also has the opportunity to earn an income from selling the rice. Co-benefits for social cohesion have also been observed: community members have opened football teams in the conflict communities and held a tournament to celebrate their



Action Against Hunger Programme Co-ordinator Joe Joe Zubahyea teaches local women in Paguir, South Sudan, on how to plant rice properly. © Peter Caton for Action Against Hunger

first meeting. Each of these activities not only helps community members escape poverty and hunger and adapt to climate change – it also contributes to peace between communities in a region that has repeatedly witnessed violence in the past years.

- Governments should repurpose agricultural subsidies towards agroecology and deliver training and tools for transformative agricultural adaptation.
- More research, analysis and innovation is needed to address the needs of small-scale farmers, particularly women; the vast majority of studies are not relevant to this population, even though they are among the most vulnerable to the effects of climate change.

TRANSFORM FOOD SYSTEMS TO UPHOLD THE RIGHT TO FOOD AND NUTRITION

- Governments must transform food systems to promote healthy and sustainable diets and climate-friendly agricultural methods such as agroecology. Global agriculture currently produces up to a third of global emissions, with particular damage caused by intensive livestock farming and the production and use of synthetic fertilisers. Instead of relying on technologies that strengthen a harmful agricultural model or enable greenwashing, governments in rich countries must switch to more sustainable ways of producing, distributing and consuming food to reduce the sector's carbon footprint and food waste and protect the biodiversity on which food security depends. In poorer countries in particular, smallholder and subsistence farmers must be enabled to produce diversified and nutritious food for their own consumption and for local markets, instead of being incentivised to produce less-nutritious cash crops.
- Healthy and nutritious food must be accessible and affordable to all people. By supporting sustainable local
 and regional production and reducing reliance on global imports, governments can make their own food
 systems fairer and more resilient. Donors and governments of all countries must support more decentralised
 food systems and promote food sovereignty by ending unfair trading practices such as export subsidies and
 stopping market speculation in relation to foodstuffs.
- Governments must address the role of poverty in driving malnutrition and increase access to universal social
 protection measures such as basic incomes, particularly during crises. Inequity and poverty must no longer be
 a barrier to adaptation. The gendered impacts of poverty and climate change on food and nutrition require
 particular attention at all levels of decision-making.

GUARANTEE WATER SECURITY AND THE RIGHT TO WATER

- Around half of the world's population experiences severe water scarcity for at least part of the year,⁶ with
 a detrimental impact on their nutrition. Scaling up investment and policy support for water, sanitation and
 hygiene (WaSH) infrastructure must be a priority in countries with a high burden of malnutrition, supported
 by donors and multilaterals. All solutions must centre on joint community management of water sources.
- In conflict and fragile contexts, climate change acts as a threat multiplier and amplifies strains, undermining
 highly vulnerable systems and institutions and threatening to make even more people food insecure.
 Governments and donors must support WaSH services that are resilient to shocks, including climate shocks,
 to ensure the human right to access safe water and sanitation.
- Groundwater provides almost half of the world's drinking water.⁷ With growing water scarcity, reliance on groundwater is increasing, with important implications for climate change adaptation. We call on governments to ensure all groundwater exploitation is designed and monitored to ensure sustainable extraction and recharge of aquifers, to avoid contamination and to ensure sustainable access to water. With groundwater being an essential resource to mitigate climate change, the equitable use of the groundwater must be guaranteed and priority must be given to domestic and public health needs to prevent conflict.

SAVE LIVES AND PREVENT FURTHER FOOD CRISES

• Communities need to be supported in their resilience. The poorest and most marginalised communities are most exposed to the impacts of climate change but receive the least support to adapt. As limits to adaptation are reached, climate impacts will increase loss and damage and exacerbate humanitarian needs.

HOW ACTION AGAINST HUNGER HELPS COMMUNITIES ADAPT HOLISTICALLY

The application of agroecology in agricultural practices – East region of Burkina Faso

In the East region of Burkina Faso, farmers testify daily to the negative impacts of climate change on agricultural production systems. The most frequent observation is the increase in rainfall variability that leads to longer drought periods and shorter rainy seasons with less rainfall; recurring floods, droughts and violent winds; more and new pests that are highly resistant to existing pesticides; and a quicker degradation of soils.

As a result of these changed weather patterns, yields decrease and farmers find it harder to feed their families. Recurrent conflict poses a challenge for farmers and herders in their struggle to adapt to a more variable climate.

Action Against Hunger helps farmers adapt by adopting agroecology. Agroecology is a way of producing crops that relies on working with existing ecosystems and is considered the best agricultural approach to achieving food security. Farmers are trained in production methods for crops such as tomatoes, eggplants, cabbages or onions and supported in the use of bio-pesticides. They also learn how to prepare soil and prevent erosion, and to manage the fertility of the land, particularly through the integration of agriculture and livestock.



Burkina Faso. © Guillaume Gaffiot for Action Against Hunger

Action Against Hunger also supports the farmers in improving food storage and conservation to overcome longer lean seasons.

Farmers participating in this agroecology initiative report a 70% increase in agricultural yields, and 70% of targeted households were able to cover their basic food needs for longer. The new practices also benefited the local ecosystem: the level of chemical and biological fertility of the soil increased by at least 25% of the farms where agroecological practices have been implemented, and plant biodiversity improved on at least 33% of participating family farms.

- Humanitarian actors at the local, national and international level must be supported to plan for and respond to
 rising needs multiplied by climate change. In addition, humanitarian and development actors must be enabled to
 prevent further crises, thereby reducing the need for humanitarian action in the first place. To support this, donors
 must provide sufficient funding that is high quality, i.e. more flexible, accessible and long-term, and that clearly
 contributes to increasing communities' climate resilience.
- Greater donor and government investment is needed to ensure that most climate-vulnerable, least-developed countries have the resources and capacity to take nationally and locally driven anticipatory action ahead of climate-related extreme events. Early warning systems must be co-designed with the communities most affected, and the relevant agencies need to be accountable to them. Clear, data-driven thresholds are required, and when these thresholds are reached, immediate action must be taken dangerous delays cost lives, as shown most recently by the drought situation in Somalia where millions are on the edge of famine.
- The humanitarian system is under-equipped and not sufficiently funded to address the scale of current and future climate impacts. More must be done for those whose land and livelihoods have been permanently lost, and to anticipate rising humanitarian needs due to extreme weather events. To achieve climate justice, adveloped countries need to establish and fund a new and additional financial mechanism to address loss and damage under the UNFCCC. This financing mechanism should be distinct from humanitarian and development financing and benefit those most vulnerable to climate impacts.

REFERENCES

- 1 Twenty-seven of the 35 countries with the highest GAIN ND index are "hunger hotspots". These include countries with a high proportion of their population in crisis situations or high food insecurity, as measured by the Integrated Food Security Phase Classification (IPC). September 2021 update of the 2021 Global Report on Food Crises.
- 2 IPCC. (2022). Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change (technical report p. 64).
- 3 Paris Agreement.
- 4 IFAD. (2021). Financing climate adaptation and resilient agricultural livelihoods.
- 5 IPCC. (2019). Summary for policymakers. In: Climate change and land.
- 6 IPCC. (2022). Climate Change 2022: Impacts, Adaptation and Vulnerability. IPCC Sixth Assessment Report, Working Group II: Climate Change 2022: Impacts, Adaptation and Vulnerability.
- 7 UN Water Development Report. (2002). Groundwater: Making the Invisible Visible. Groundwater: Making the Invisible Visible.
- 8 "Climate justice is the principle that the benefits reaped from activities that cause climate change and the burdens of climate change impacts should be distributed fairly." Climate Justice | MIT Climate Portal