

CGIAR Campaign/COP28 Key Messages

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Top line talking points

- Climate change is fueling a global food crisis. Levels of hunger and malnutrition stand at record highs. Without urgent action to build resilience to climate change, many more lives and livelihoods will be lost.
- Agriculture and food systems – the way we transport, process, trade, store and consume food – must be part of the solution to climate change. The world simply cannot meet the climate and development goals without transforming food systems.
- CGIAR is the world’s largest publicly-funded agricultural research network, with 10,000 staff working in over 80 countries with +3,000 partners.
- For over 50 years, CGIAR has been at the forefront of agricultural research and innovation, uniquely positioning it to tackle the interconnected challenges of climate change and food insecurity:
 - CGIAR’s work on modern crop varieties has reduced infant mortality by a third across the developing world – averting between 3 and 6 million infant deaths each year;
 - Almost half the world’s wheatland is sown with varieties that come from research by CGIAR scientists.
- Today, CGIAR is equipping smallholder farmers around the world with the know-how and innovations they need to produce more and better food with fewer resources, protect natural resources and biodiversity, and adapt to changing and challenging environments.
- The Ceres 2030 report identifies the need to double investment in agricultural R&D to help end hunger, double smallholder farmer incomes, and protect natural resources and the environment.
- **In this context, CGIAR is launching an Investment Case at COP28 as the start of a campaign to raise \$4 bn for the next CGIAR research portfolio. The \$4bn investment will harness the power of science and innovation to tackle climate change, increase productivity and build more resilient food systems.**
- For every \$1 invested in agricultural research and development, investors see \$10 worth of benefits to smallholder farmers, vulnerable communities and ecosystems.
- The world needs CGIAR science today more than ever. With science, food systems can transform from being a source of emissions to a sink for carbon, from fueling environmental degradation to supporting regeneration, and from reducing biodiversity to protecting it.
- The global community must seize this moment and support critical research and innovation now. Join us in investing in CGIAR research and innovation.

Full key messages

Climate change is fueling the [largest food crisis in modern history](#). Levels of hunger and malnutrition stand at record highs. Without urgent action to build resilience to climate change, many more lives and livelihoods will be lost.

- Around the world today, around 800 million people faced hunger in 2021¹ and nearly 350 million people are affected by extreme hunger. Consumers around the world are struggling with erratic food supplies and prices.
- Climate change and food security – two of the world’s most urgent challenges – are inextricably linked. In a world that is 2°C warmer, an [additional 189 million people](#) will face hunger. In a 4°C warmer world, an additional 1.8 billion people will go hungry.
- A third of greenhouse gas emissions come from agriculture, forestry, and land use – and this number increases to 70 percent in low- and middle-income countries. Agriculture and food systems are the biggest driver of deforestation and responsible for 60 percent of biodiversity loss; 62 percent of irrigated land is degraded.
- Many of the 500 million small-scale farmers who provide a third of the world’s food on 83 percent of the world’s farms live in regions especially affected by climate change, putting their lives and livelihoods at risk.
- Global agricultural growth rate has [declined by nearly 21 percent](#) in the past 60 years due to climate change.

We urgently need to transform our food, land and water systems to both reduce emissions and help farmers adjust to the changing climate.

- Agriculture and food systems must be part of the solution to climate change. The world simply cannot meet the climate and development goals without transforming food systems.
- Agriculture is a powerful lever for development outcomes. Lifting agricultural productivity is the single most effective way to reduce poverty and inequality and raise incomes, directly supporting the Sustainable Development Goals (SDGs).
- The Ceres 2030 report identifies the need to double investment in agricultural R&D to help end hunger, double smallholder farmer incomes and protect the climate.
- But the world is underinvesting in the solutions we need to meet the SDGs and climate targets:
 - Not nearly enough overseas development assistance – just 7.4 percent in 2021 – is spent on research and innovation that tackles the root causes of hunger and malnutrition;
 - More government spending (\$108 billion globally) went to R&D for the energy sector in 2017-2022, reducing emissions by 13 gigatons of carbon dioxide equivalent per year. A significantly lower investment of \$70 billion in R&D in the agriculture sector would reduce emissions by 15 gigatons a year;
 - Not nearly enough investment – just 1.7% in 2018 – reaches the smallholder farmers who are vulnerable to challenges of climate change, despite their critical contribution to global food security and local economic stability.

As the world’s largest publicly-funded agricultural research network, with 10,000 staff working in over 80 countries with +3,000 partners CGIAR is uniquely positioning it to tackle the interconnected challenges of climate change and food insecurity.

- For over 50 years, CGIAR has used science and innovation to take on humanity’s greatest challenges:
 - CGIAR is best known for preventing a food crisis across Asia and Africa by developing the high-yielding rice variety that drove vital increases in food production in the second half of

¹ FAO et al., 2022.

the 20th Century. The work led by Nobel Laureate, Dr Norman Borlaug, and Professor M.S. Swaminathan is credited with averting a global famine, saving a billion lives;

- Almost half the world's wheatland is sown with varieties that come from research by CGIAR scientists;
- CGIAR's work on modern crop varieties has reduced infant mortality by a third across the developing world – averting between 3 and 6 million infant deaths each year.
- Today, CGIAR is equipping smallholder farmers around the world with the know-how and innovations they need to produce more and better food with fewer resources, protect natural resources and biodiversity and adapt to changing and challenging environments.
- CGIAR also provides the research and innovations that helps policymakers and science and business networks shape a better future for people and our planet.

CGIAR is launching an Investment Case at COP28 as the start of a campaign to raise \$4bn for the next CGIAR research portfolio. The \$4bn investment will harness the power of science and innovation to tackle climate change, increase productivity and build more resilient food systems.

- The world needs CGIAR science today more than ever. But to unlock the full potential of innovation, the global community must increase its investments in climate and agriculture R&D.
- New funding will support CGIAR scientists, experts, and partners in hundreds of countries to scale investments in world-changing innovations, from new tools and technologies for farmers (like AI-enabled apps to diagnose diseases in plants) to more nutritious and climate-resilient crops (including bio-fortified sweet potatoes and scuba rice).
- CGIAR evaluates impact systematically. We have robust evidence that for every \$1 invested in agricultural research and development, investors see \$10 worth of benefits to smallholder farmers, vulnerable communities and ecosystems.
- The adoption of CGIAR crop technologies in developing countries is estimated to have resulted in cumulative economic benefits of \$1,375-\$1,477 billion between 1960 and 2020.
- Investing in the next CGIAR research portfolio will help ensure that:
 - 500 million smallholder farmers across low- and middle-income countries being supported to become more climate resilient;
 - Greenhouse gas emissions from the agricultural sector decrease by 1 gigaton per year by 2030;
 - Nationally Determined Contributions towards the Paris Climate Agreement include an evidence-based target on agriculture, informed by relevant and localized research and data;
 - Biodiversity and planetary boundaries are protected, limiting resource overexploitation.

With science, we can tackle the urgent food and climate crises. The global community must seize this moment and support critical research and innovation now. Inaction is not an option – join us in investing in CGIAR scientists.