Elevator Pitch

Climate change is fueling a global hunger crisis. Without urgent action now, the world will not be able to adapt to the impacts of climate change and billions of people will go hungry.

Avoiding this scenario is possible. As the world’s largest publicly funded agricultural research network, CGIAR is uniquely positioned to address this pressing issue. For over 50 years, CGIAR has used science, innovation, and partnerships to take on humanity’s greatest challenges. Now, CGIAR is helping smallholder farmers across the global South build resilience and reduce emissions from farming, while also ensuring that communities around the world have better access to nutritious foods.

The world needs CGIAR’s research and expertise to tackle the overlapping food and climate crises. But to meet the size and scale of the challenge, CGIAR must double its annual budget by 2030 to $2 billion per year. This means securing $4 billion to fund its 2025-2027 research portfolio.

High-Level Narrative

Our ability to nourish the world in a way that protects people’s health without harming the planet is under severe threat. Climate change is wreaking havoc on the world’s food, land, and water, fueling the largest food crisis in modern history. If we don’t act now to address these growing emergencies, millions more lives and livelihoods will be lost on an increasingly devastated planet.

- Around the world today, nearly 350 million people are affected by extreme hunger.
- 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.
- Agriculture is both a major contributor to climate change and deeply affected by it. Global agricultural productivity has declined by nearly 21 percent in the past 60 years due to climate change. In Africa, this decline is even more severe, at 30 percent.
  - But as the global population surpasses 9 billion people by 2050, food production will have to increase 60% to meet growing demand.
- At the same time, the Intergovernmental Panel on Climate Change (IPCC) estimates that agriculture, forestry, and other human use of land produce almost a quarter of global greenhouse gas emissions. Our current approach to food systems is depleting soil and water resources, threatening biodiversity, and destroying vast forest and wetland areas, forcing the world down an increasingly unsustainable path.
- Those most affected by both the food and climate crises are smallholder farmers in the global South who struggle to produce and earn enough in a sector that is already characterized by low productivity and product prices, as well as poorly paid, insecure jobs.

We urgently need innovative approaches that address the current food crisis and meet the demands of a changing climate. CGIAR is uniquely positioned to tackle these challenges, delivering solutions that will help the world achieve its ambitious climate targets while protecting those most affected by the climate crisis.
• For over 50 years, CGIAR has delivered the science, innovation, and partnerships to tackle humanity’s greatest challenges.

• CGIAR brings together a network of 13 research institutions across the globe that share a common mission: transforming food, land and water systems in a climate crisis to deliver food- and nutrition-security for all. Its guiding vision is a world with greener, climate-resilient agriculture systems that contribute to ending the current food crisis.

• Using science and evidence to promote change, CGIAR’s decades of experience have already yielded impressive results:
  o Almost half the world’s wheatland is sown with varieties that come from research by CGIAR scientists.
  o 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.
  o CGIAR researchers developed a biofortified orange-fleshed sweet potato to tackle vitamin-A deficiency in children and women of reproductive age. Today, more than 6.8 million households in Africa and South Asia are growing and eating nutrient-enriched sweet potatoes.
  o Thanks to 11 genebanks maintained around the world, CGIAR keeps seeds in trust for humanity, safeguarding the world’s crop diversity for future generations; governments can request these seeds at any time to restore indigenous plants or try new varieties.
  o CGIAR also supports farmers on crop and livestock management, using technology like weather apps to better plan crop preservation, or aligning on when best to plant different types of crops based on their seasonality.

Building on its experience delivering world-changing science to advance the transformation of food, land, and water systems globally, CGIAR’s 2030 Research and Innovation Strategy outlines concrete actions to address the urgent overlapping climate and food security crises.

• The strategy aims to build climate resilience for 500 million smallholder farmers in low- and middle-income countries, reduce greenhouse gas emissions from agriculture, and closely partner with governments to ensure that national plans include the most impactful food and climate policies.

• To deliver on the Strategy’s goals, teams of CGIAR scientists across multiple disciplines have crafted a portfolio of initiatives that focuses on three priority areas for action:
  o **Developing vital new farming tools and techniques (resilient agrifood systems):** Developing resilient approaches to farming and supporting food systems that drive sustainable land and water use. This also enhances nutrition, protects livelihoods, and safeguards environments.
    ▪ For example, a new monitoring system in Timor-Leste supports researchers and decision-makers to better track fishing activities, enabling greater understanding of how fisheries contribute to local livelihoods and food security.
  o **Developing new and improved plant varieties (genetic innovation):** Operating genebanks and crop improvement programs to ensure the world has access to better seeds that yield both climate-adaptable and sustainable plants.
    ▪ CGIAR has already supported research for the development of biofortified plants, which result in more nutritious food products. Now, this research is expanding to include plants that can be grown in higher temperatures or with less water.
  o **Supporting country implementation of new innovations (systems transformation):** Working with governments to craft policies that support the implementation of sustainable...
agriculture and food systems, and operating public-private partnerships to ensure that new innovations reach the communities that need them most.

- For instance, following Russia’s invasion of Ukraine, which had significant implications for food security, CGIAR’s National Policies and Strategies initiative worked closely with government partners in Egypt, Kenya, and Nigeria to inform policies aimed at mitigating the conflict’s impact and respond to each country’s needs.

Inaction is not an option; to tackle the urgent food and climate crises, the global community must seize this moment and support critical research and innovation now. To develop new, necessary tools and help hundreds of millions of smallholder farmers adapt to our warming world, donors need to double their contributions to agricultural research and development (R&D). That’s why CGIAR is seeking to increase its annual operating budget from US$ 1 billion to US$ 2 billion by 2030, which translates to securing US$ 4 billion to fund its 2025-2027 research portfolio.

- Already, as many as 828 million people around the world are unsure of where their next meal is coming from. And yet, efforts to address these overlapping food and climate crises suffer from a chronic lack of investment, with current funding levels falling short of what is needed to durably and sustainably adapt food systems and end hunger around the world.
- Unless countries prioritize transformative change very soon, existing approaches to food production may eventually threaten the survival of our ecosystems, economies, and communities.
- By doubling their funding towards food security, donors can prevent 490 million people from experiencing hunger, double the incomes of 545 million producers and their families, and limit agriculture’s greenhouse gas emissions.
- CGIAR has the expertise and a strategy to meet this challenge. With increased political and financial commitments, CGIAR can deliver on its ambitious plan and achieve a world that delivers nourishment and prosperity for all.
- With a return on investment of up to 10:1, CGIAR is among the best investments donors can make in our common future. By further increasing its scope, ambition and pace, CGIAR can help deliver healthier, more sustainable, more resilient food systems for people and planet.

Investment Case

CGIAR has an ambitious plan to double its annual operating budget from US$ 1 billion to US$ 2 billion by 2030 – which means securing US$ 4 billion to fund its 2025-2027 research portfolio – to achieve its vision of a world with sustainable and resilient food, land, and water systems that deliver nourishment and prosperity for all.

To realize this vision, CGIAR is coordinating a major resource mobilization effort kicking off at COP28 in late 2023. This intensified fundraising effort will be supported by a comprehensive investment case that details a concrete plan to achieve CGIAR’s vision.

- This investment case will make a compelling argument about the need for increased investment in climate/agriculture R&D, the essential role CGIAR plays at the heart of that effort, and the organization’s ambitious vision for the future.
- This case will support intensified engagement with existing and potential donors, emphasizing the role that they can play in affecting change to create a world that is healthy for people and planet.