



CGIAR

Science and innovation to  
transform food systems in  
Latin America and the Caribbean





# FOOD SECURITY IN CRISIS

The world is currently facing a series of **unprecedented global challenges**. Food security is one of them.



By 2050, **70% more food** will be required to feed humanity (compared to 2010).<sup>1</sup>



Food production capacity is **decreasing**, mostly due to climate change.



In 2021, **828 million people** were suffering from hunger —46 million more than in 2020.<sup>2</sup>

**Food systems** —the way we produce, process, transport and consume food— **are in crisis**, and this crisis translates into economic inequality, social unrest and conflicts.

The food system crisis is taking place **in the context of a more global crisis** that has come to be known as **the three Cs crisis**: Climate, COVID and Conflict.

## LATIN AMERICA AND THE CARIBBEAN, A KEY REGION FOR FEEDING THE WORLD

The Latin America and the Caribbean region plays an **essential role in global food production** and the conservation of **the planet's biodiversity**. The region holds:



The world's largest reserve of arable soil.



**30%** of the planet's renewable water and **46%** of its tropical forests.



**30%** of the world's biodiversity.

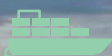


**33%** of available land.



**75%** of water resources.<sup>5</sup>

The **importance of agriculture and rural areas** in the region is undeniable:



It is the world's largest food exporting region —14% of the food that is commercialized in the world.<sup>3</sup>



Over 20% of the region's exports and jobs stem from its rural areas.<sup>4</sup>

The focus on food exports and processed foods is threatening **local resources and traditional agrifood production practices**.

1. ECLAC (2021), *Balance preliminar de las economías de América Latina y el Caribe 2020*. <https://repositorio.cepal.org/handle/11362/46501>.

2. FAO et al (2022), *El Estado de la Seguridad Alimentaria en el Mundo 2022*. <https://www.fao.org/publications/card/es/c/CC0639ES>.

3. World Bank (2020), *Future Foodscapes. Re-imagining Agriculture in Latin America and the Caribbean*.

4. ECLAC (2021), op. cit.

5. World Bank (2020), op. cit.



## WHAT IS CGIAR?

During its history, which spans over 50 years, CGIAR has consolidated itself as **the world's largest scientific agricultural research network**. CGIAR now brings together:

**13** research centers throughout the world.

A network of more than **3.000** institutional partners.

Approximately **9.000** staff in almost **90** countries.

**In 2019, CGIAR initiated a broad reform process.** The evolution towards One CGIAR means that this extensive research network works in a more unified, coherent and focalized way. Its increasingly coordinated global structure, governance and strategic vision are unfolding through **more multidimensional thematic and regional initiatives**, while its research centers continue to be the pillars of its activity.

### Our mission

Use science and innovation to **transform food, land and water systems in the context of the climate crisis**. In other words: use science to ensure that food security is a right for all and not a privilege for a few.

### Our vision

- **Food systems** must be more **sustainable, inclusive and equitable**, as proven by the United Nations Food Systems Summit.
- The food system reform should be the **first step in a change** that would guarantee sustainable livelihoods for all humanity.
- This reform requires a **global effort** by governments, international organizations, academic and scientific institutions, the private sector and civil society.
- This change requires scientific and technological innovation that CGIAR's global research experience brings to the table.

## OUR 2030 RESEARCH STRATEGY<sup>6</sup>

### Foundations

- Investments in CGIAR's research endeavours have a rate of **return of 10:1**.
- Our **in-depth knowledge of the countries and partners** with which we work.
- A **collaborative approach** based on the 2030 Agenda principles: trust, shared vision and common objectives.

### Research areas

- Nutrition, Health and Food Security.
- Poverty Reduction, Livelihoods and Jobs.
- Gender Equality, Youth and Social Inclusion.
- Climate Change Adaptation and Mitigation.
- Environmental Health and Biodiversity.

### On the right path

- In 2021 alone, CGIAR developed 1,152 innovative solutions (66% of which are genetic innovations).
- Of these solutions, 263 are available for uptake and 69 are already in use.

6. CGIAR: <https://cgspace.cgiar.org/bitstream/handle/10568/110918/OneCGIAR-Strategy.pdf>.

# OUR ACHIEVEMENTS

## Global achievements

About 60% of the world's agricultural land planted with **improved varieties** includes many of the approximately 7,250 varieties resulting from CGIAR research.

The **CGIAR's methods for surveillance and climate modeling**, developed over more than 35 years, **have informed key policies** on agriculture and climate adaptation **around the world**.

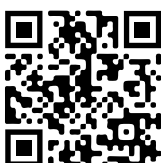
The 82 **New Rice for Africa (NERICA)** varieties used around the world have **brought food security to 7.2 million people** and lifted about 8 million people out of poverty.

The Research Program on Roots, Tubers and Bananas has enabled **12.7 million rural families** in Africa and Asia **to increase their food production**.

Rust-resistant wheat varieties developed by CGIAR have **added 6.2 million tons annually** (over US\$1.0 billion per year) to world wheat harvests.

CGIAR has developed more than **200 climate-resilient maize varieties**. These varieties give at least 25%-30% greater yields than conventional varieties.

More than **50 million smallholder farmers** in 41 countries **benefit from biofortified crops** developed by CGIAR's Harvest Plus Program.



Access CGIAR  
Research Initiatives

#OurInitiatives



# VEMENTS

## Achievements in Latin America



In **Bolivia**, the MAC-18 **rice variety**, developed by CGIAR, has been **adopted by one out of four Bolivian rice producers**, increasing their market share.



In **Peru**, CGIAR has promoted business products and initiatives through its **Farmer Business Schools**.



In climate-smart villages in **Colombia, Honduras, Guatemala and Nicaragua**, over **60% of farmers have increased their yields** due to the use of agroclimatic information, water harvesting systems and water-stress-resistant seeds.



The creation of a **payment for ecosystem services** system in the Cañete River basin (**Peru**) has halted the deterioration of land in the upper basin.



In **Honduras, El Salvador and Guatemala**, the Seeds for Needs program has enabled the identification of **bean varieties** that can survive in the context of changing climate conditions.



The **Technical Agroclimatic Committees** (CTAs, for its Spanish acronym) enable **more than 500,000 farmers from 11 countries** to access information on climate variations, understand their impact on crops and take measures to reduce losses.



The CGIAR was key to the elaboration of the **Climate-Smart Agriculture Regional Strategy for the Central American Integrated System** (SICA, for its Spanish acronym), approved in 2017.

Our 50-year history is characterized by important achievements that **have changed the lives of millions of people throughout the world**. Under the most conservative assumptions, **the value of the economic benefits of CGIAR's research doubles investment costs**.

However, the benefits of these investments extend way beyond any monetary calculations.





# CGIAR's VALUE PREPOSITION FOR

## A key partner for the region



The **Regional Directorship for Latin America and the Caribbean**, established during the CGIAR reform process, was created to provide a **clear entry point to the CGIAR** for the different stakeholders in the region (governments, businesses, farmer organizations, international organizations and others), to channel their agricultural research and innovation needs and activate the entire CGIAR network.

Due to our capacity and experience, we can be a key partner for Latin America and the Caribbean to:

- Optimize its **biodiversity** to improve its **food security** and nutrition.
- Consolidate its position as the main **food exporting** region.
- Mitigate the deterioration of its **natural heritage**.
- Ensure the optimal use of its **arable land**.
- Decrease the productivity gap between agribusiness and family farming.

## Our resources in Latin America and The Caribbean



In 2022, CGIAR invested **US\$30 million** in Latin America and the Caribbean through its global and regional initiatives. Additionally, the total value of the portfolio of ongoing bilateral initiatives with at least partial implementation in Latin America and the Caribbean is **US\$200 million**. CGIAR's contribution to the region goes beyond these financial resources and includes:

- Our **research centers** based in the region:
  - Alliance of Bioversity International and the International Center for Tropical Agriculture (**Alliance Bioversity-CIAT**), in Colombia.
  - International Maize and Wheat Improvement Center (**CIMMYT**), in Mexico.
  - International Potato Center (**CIP**), in Peru.
  - Latin America and the Caribbean regional office of the International Food Policy Research Institute (**IFPRI**).
- **16 global research initiatives** benefiting countries in the region.
- **A regional research initiative**, AgriLAC Resiliente.

## AgriLAC Resiliente



AgriLAC Resiliente is a CGIAR initiative designed from a **completely Latin American perspective**. With an initial annual budget of **US\$4 million**, it aims -with the support of governments, private sector, civil society and regional and global donors- to improve the livelihoods of **rural producers** in the region, building their capacities to:

- Solve urgent **food security needs**.
- Mitigate **climate risks**.
- Stabilize communities that are vulnerable to **conflict**.
- Reduce **forced migration**.

# LATIN AMERICA AND THE CARIBBEAN

## A regional approach to reforming food systems

To guarantee the success of the food system reform in Latin America and the Caribbean, the region must establish clear priorities and a **common research agenda** that is carefully planned and includes collaboration with a broad range of public- and private-sector partners.

With adequate financing, CGIAR can make decisive contributions to:

- Strengthening regional and global **food security**.
- Building sustainable **food systems** in the region.
- Invigorating dialogue on the **regional agrifood research and innovation agenda**.
- Supporting and strengthening **national agricultural extension and research systems**.



## Financing for research and innovation

The funds contributed by our funders (governments, bilateral and multilateral cooperation and financial institutions, philanthropic foundations) are key to maintaining CGIAR's research activities. **Three financing channels** support the network's endeavours:

- **CGIAR Trust Fund Window 1** (housed at the World Bank) to support the entire portfolio of initiatives, concrete initiatives or the CGIAR's global system.
- **CGIAR Trust Fund Window 3** (housed at the World Bank) to support specific projects designed in collaboration with CGIAR.
- Bilateral **investments** in CGIAR centers for specific activities.



## A greater presence of Latin America and the Caribbean

Contributing to CGIAR's funding implies a **more significant role in defining its vision** and in its decision-making processes. Funders represent the most important part of the **System Council**, and the System Council and System Board are the network's main governing bodies.

A greater financial contribution from partners in Latin America and the Caribbean would **increase the visibility of the region's needs, challenges and capacities** within CGIAR's strategic dialogues, as is already the case of international financial institutions from other regions (i.e., African Development Bank or Asian Development Bank).







## CGIAR CENTERS



Learn more about CGIAR's work in Latin America and the Caribbean

[www.cgiar.org](http://www.cgiar.org)

✉ [lac-rd-office@cgiar.org](mailto:lac-rd-office@cgiar.org)

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