



PRIMARY IMPACT AREA



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Challenge

Latin America and the Caribbean together hold the planet's largest reserve of arable soils, 30% of renewable water, 46% of tropical forests and 30% of biodiversity. Climate change and natural disasters, exacerbated by COVID-19, have eroded economic and food security in the region, destabilizing communities and triggering migration. Further breakdown of the region's most vulnerable agrifood systems will push millions globally into food insecurity, unleash unprecedented migration, especially of young people, and jeopardize our ability to achieve the Sustainable Development Goals.

Agricultural expansion and intensification, and urbanization, have degraded over 20% of forests and farmlands in the region, affecting productivity, carbon storage and biodiversity. Regional food production depends on smallholders, whose livelihoods are threatened by climate change. Farmers lack access to training, improved technologies and remunerative markets. High uncertainty due to climate variability discourages new investment and agricultural value chains fail to incentivize resource efficiency, agricultural diversification and inclusivity. Socioeconomic disparities are more pronounced for women and indigenous peoples, whose participation in agrifood system innovations is hindered by deep-seated inequalities.

Objective

This Initiative aims to increase the resilience, sustainability and competitiveness of Latin American and Caribbean agrifood systems and actors by better equipping them to meet urgent food security needs, reduce climate threats, stabilize conflict-vulnerable communities and reduce out-migration.

Activities

This objective will be achieved through:

1. **Shaping nutrition-sensitive socioecological-technological “best bets” to operationalize local agrifood system transition to climate-resilient nutrition pathways**, to ensure local actors can access and will use tailored climate-resilient and nutrition-sensitive technologies

supported by enhanced capacity of national agricultural research extension systems (NARES).

2. **Establishing inclusive, digitally enabled agro-advisories for risk management**, consolidating a digital-enabled ecosystem around climate risk management and sustainable intensification across value chains in Colombia, Guatemala, Honduras and Mexico.
3. **Developing an agrifood system that meets both mitigation and sustainable development objectives**, integrating sustainable development priorities, social inclusion and gender-responsive frameworks into efforts to mitigate climate, building an investment-friendly climate around low-emission agrifood system development.
4. **Creating InnovaHub (innovation hub) networks for agrifood innovation and scaling** to accelerate the development, mainstreaming and early commercialization of innovative tools, technologies and approaches to the adoption of climate-responsive agrifood system pathways.
5. **Enabling science-informed policies, investments and institutions**, supporting the adoption of climate-resilient and competitive practices for reducing food insecurity and out-migration, particularly in the context of the current global crisis.

Engagement

This Initiative will work in Colombia, El Salvador, Guatemala, Honduras, Mexico, Nicaragua and Peru.






Outcomes

Proposed three-year outcomes include:

1. Nutrition-sensitive innovations co-designed with local actors enable agrifood systems in four regional countries to effectively align the technical aspects of transition processes with the socio-ecological needs of at least 200,000 farmers.
2. A digital ecosystem spanning three Latin American and Caribbean countries empowers producer associations, agritech companies, government agencies, NGOs and public extension services to offer digitally enabled agro-advisory services to at least 200,000 farmers.
3. Low-emission strategies with development goals across agroecosystems, landscapes and value chains, reaching at least 300,000 hectares, are integrated by national and local governments in three Latin American and Caribbean countries.
4. InnovaHub learning, knowledge management and evidence in four Latin American and Caribbean countries accelerate on-farm uptake and scaling of innovations, making them more gender-responsive, production-friendly and context-specific, reaching at least 200,000 farmers.
5. CGIAR science, evidence, and tools are used by public and private institutions in three Latin American and Caribbean countries to inform and shape more transformative, sustainable, mitigation-comprehensive and climate adaptation-friendly policies, incentives and initiatives. These are then mainstreamed and scaled throughout three countries.

Impact

Projected impacts and benefits¹ include:

	NUTRITION, HEALTH & FOOD SECURITY Local and regional food systems are reconfigured to ensure access to nutritious diets for rural and urban populations, produce balanced food baskets and ensure food security, reaching 8 million people across the region by 2030.
	POVERTY REDUCTION, LIVELIHOODS & JOBS Co-designed and tested CGIAR innovations increase farmers' incomes, empower women, and enhance youth capacities, facilitating access to diversified and nutritious food, and reaching 8 million people across the region by 2030.
	GENDER EQUALITY, YOUTH & SOCIAL INCLUSION Female and male smallholder farmers of all ages play an important role as data curators and interpreters of decision support tools in rural communities. Youth provide technical support to field monitoring and data cubes. Outcomes are gender-responsive through active involvement for understanding major challenges and opportunities for women, reaching 2.5 million women across the region by 2030.
	CLIMATE ADAPTATION & MITIGATION Climate-related policies and investments informed by CGIAR research, and access by farmers to more accurate, tailored, and timely information via CGIAR innovations benefit at least 8 million people across the region by 2030.
	ENVIRONMENTAL HEALTH & BIODIVERSITY Promotion and adoption of climate-, water- and nutrient-smart practices enhances multifunctional landscapes and enables integrated crop-tree-livestock systems, with a focus on sustainability of agriculture under climate and other stresses, improving management on 19 million hectares of land.

Partners

This Initiative has strong social capital and partnerships at regional and prioritized country levels. We engage partners from design phase on, so they a) benefit from, b) replicate at larger scale with additional investments within their own country/regional strategy and ongoing projects/programs, and c) multiply through new partnerships, the initiative innovations based on their context-specific needs. Demand, innovation and scaling partners include CGIAR, ministries of agriculture, institutions under the NARES agencies for international development, advanced research institutions/universities, regional organizations, international and local NGOs, the private sector, rural small and medium enterprises, extension and agro-advisory services, food processing businesses, farmers' and growers' organizations, etc.

For more details on this Initiative, visit the [Initiative website](#).

Header photo: Coffee picking in Cauca, southwestern Colombia. Part of the Two Degrees Up case studies series on the effects of climate change on agriculture. Photo by N. Palmer/CIAT.

¹ Projected Benefits are a way to illustrate reasonable orders of magnitude for impacts which could arise as a result of the impact pathways set out in the Initiative's Theories of Change. In line with the 2030 Research and Innovation Strategy, Initiatives contribute to these impact pathways, along with other partners and stakeholders. CGIAR does not deliver impact alone. These projections therefore estimate plausible levels of impact to which CGIAR, with partners, contribute. They do not estimate CGIAR's attributable share of the different impact pathways.