# CIMMYT Nourishing the World Sustainably 2023–2027



CIMMYT (the International Maize and Wheat Improvement Center) is a world-leading research-for-development organization founded in 1966 and building on the ideals and achievements of 1970 Nobel Peace laureate, Norman E. Borlaug. In 1960, the world produced 692 million tons of grain for 2.2 billion people. Largely as a result of science and policy advances initiated by Borlaug and other hungerfighters of the era, global production reached 1.9 billion tons for 5.6 billion people, using only 1% more land, in 1992.

We specialize in breeding high-yielding, hardy maize and wheat varieties and other crops that form part of cereal legumes and pulses cropping systems, supported by training for farmers and partners. Equally important and complementary is our sustainable intensification research-for-development. We have recently expanded our cereals-legumes systems research to incorporate sorghum, millet, and groundnut, in line with longstanding CIMMYT research on diversified cropping and crop-livestock systems. Our mission is to deliver high-quality science to farmers, consumers, and other value chain actors around the world, empowering them to co-develop improved technologies, diversify production, and seize their potential to contribute to sustainable socio-economic progress and human wellbeing.

Our offices are based in 13 locations across Africa, Asia, and Central and Latin America and leverage hundreds of time-tested partnerships with public agricultural research programs, extension agencies, universities, advanced laboratories, private companies, and non-governmental and farmer organizations. CIMMYT is a founder member of the CGIAR (1971), then made up of four research centers, today a multi-Research Center global research partnership for a food-secure future.

Our scientific breakthroughs and partnerships have helped a billion farmers in the Global South grow more food in

more efficient and profitable ways, while better managing natural resources:

- Nearly 90% of our research connects climate change with food systems, with findings amplified across thousands of websites and platforms.
- Half the maize and wheat varieties in developing countries carry contributions from our breeding research. Wheat varieties that possess CIMMYT genetics are grown on more than 100 million hectares. Six of every ten maize varieties in Sub-Saharan Africa are CIMMYT-derived.
- We maintain the world's largest gene bank for maize and wheat, with more than 175,000 unique seed samples for study, sharing, and developing future varieties.
- Breeding work generates US\$4.5-5 billion each year in added benefits to farmers/consumers, for a US\$50-60 million investment.

Aiming for expanded, scaling-oriented partnerships with funding support of US\$1.2 billion over the next five years and US\$3.0 billion over the next decade, CIMMYT is seeking to combat hunger, poverty, land degradation, and climate change in key agroecological systems more effectively and broadly. This is now more urgent than ever.

# Transformation of agrifood systems

Today's agrifood systems fail to deliver healthy diets to most, while causing widespread environmental damage, including deforestation and destructive releases of greenhouse gases and toxic chemicals. By 2050, agrifood systems will need to deliver twice as much food as today, while radically reducing environmental degradation.

*I cannot sit idly by in the midst of abject poverty and hunger and human misery.* 





Norman E. Borlaug, first CIMMYT wheat director

At every scale, current agrifood systems urgently need improvement to enhance their climate resilience, natural resource use, biodiversity, and food delivery.

CIMMYT and its partners are well-placed to do this, through socially inclusive innovations that integrate breeding, genetics, agronomy, enhanced nutrition, and policy, with emphasis on helping hundreds of millions of small-scale and resource-challenged farmers in locations ill-served by markets and policy support. Our research on maize and wheat farming, agrifood systems and associated crops such as rice, beans, and legumes addresses the complex interactions of genetics with crop management and farm environments. Moreover, we have pioneered innovation hub networks, such as MasAgro, to test and adapt locally suited technology.

Our climate research focuses on at-risk regions such as Sub-Saharan Africa and South Asia. Offerings include resilient varieties and crop management innovations that help farmers to grow productive crops under heat, dry conditions, and erratic rainfall, as well as practices that help to "farm without doing harm", such as those that reduce greenhouse gas emissions.

#### Boots on the ground

Decades of direct engagement with national scientists and farmers has allowed CIMMYT to develop a deep understanding of the agronomic, sectoral, institutional, and policy dynamics that shape agrifood systems and their critical role in human wellbeing. This knowledge, along with our capacity development efforts and impartial assistance to farmers, has built our reputation as a trusted innovation broker in national and regional policy circles.

#### Socially inclusive innovation

Building on half a century of partnership-based, data-driven scientific advances, we are pursuing systems-thinking approaches and socially inclusive research which recognize that communities differ in how they make decisions, share power and innovate climate-smart practices. Research-for-development is tailored to the needs of these farmers and policy actors in specific production systems and value chains.

## **Our aspirations**

# Demand-driven research and development with high return on investment

Very high returns on investment in agricultural research-fordevelopment are well documented, but so is the considerable time lag between scientific advances and real-world benefits. The Global South is greatly disadvantaged in its pursuit of climate-resilient economic prosperity, while imported technology is often of little value to the numerous small-scale farmers, who operate within fragmented value chains and face chronic risks. In response, we undertake robust, sustained researchfor-development to deliver innovations that farmers in decentralized agrifood systems want, to increase and diversify their incomes whilst protecting biodiversity – such as the Cereal Systems Initiative for South Asia (CSISA), spanning four countries and CGIAR Centers. We solve tomorrow's problems, combining climate change effects, natural resource conservation, socio-economic empowerment, and improved nutrition and health.

#### Positioned for rapid deployment

From our Mexican HQ and global offices, our 1,250 staff have built long-term trust with farmers, value chain actors, and policy makers. By combining our innovative science with these boots-on-the-ground networks of partners, such the International Wheat Improvement Network, we have refined and continually improved rapid deployment models that minimize lag-time for our interventions.



By acting fast and in unison to adapt to regional differences, we have improved the lives of hundreds of millions of smallholder farmers and their families in the 49+ countries where we operate.

## **Funding the future**

Today, the world falls short of our vision and what we know to be possible – a world with healthier and more prosperous people, protected from the threat of global food insecurity and with resilient agrifood systems. We stand ready to meet this challenge strategically and in partnership with all who are committed to this vision.

Funders who share our vision have invested US\$545 million over the past five years. To pursue our vision for the next five years, we will fully utilize our expertise in integrated

agrifood systems and sustainable socio-economic progress through demand-driven, agrifood system innovation. To do this, we need partners who believe in the future that we know is possible and who can make multi-year commitments.

For more information, please contact: Victor Kommerell (v.kommerell@cgiar.org) Interim Director, Donor Relations and Fundraising Support.