



Chitsanzo Farmer Field School in Namulenga, Malawi (photo: IITA)

Toward an inclusive, healthy, and sustainable Malawi

CIP, CIAT, CIMMYT, ICRAF, ICRISAT, IFPRI, IITA and WorldFish

Comprised of 15 top-class research centers, CGIAR is the world's largest global agricultural innovation network. Eight centers based in Malawi contribute to the national development priorities through an unparalleled combination of skills, knowledge, and partnerships with government, NGOs, academic institutions, and the private sector.

Background

Globally, CGIAR is moving towards a unified and integrated 'One CGIAR' operation with a shared mission of *"Ending hunger by 2030 - through science to transform food, land and water systems in a climate crisis."* CGIAR has been working in Malawi since the early 1980s conducting research and implementing food security projects to improve livelihoods of smallholder farmers. Research, policy, and development activities cover a range of crops including fish, cereals, legumes, fodder, fruit trees, root and tuber crops, and include the development of delivery systems and value chains for each of these products.

The projects are implemented with national partners and well-aligned with Malawi's agricultural development priorities for agricultural sector growth and national development. The Centers work along value chains in the areas of nutrition, food safety, seed systems, variety development, sustainable natural resource management, and pest and disease management, among others. In addition, our work focuses on post-harvest handling, marketing, processing, and evidence-based policy advice. Our successful collaboration over the years and extensive and diverse expertise attest to our ability to offer multidisciplinary perspectives to address complex constraints facing agriculture in Malawi.

Objectives

The key objective of CGIAR in Malawi is to advance agri-food science and innovation to enable poor people, especially poor women, to increase agricultural productivity and resilience, share in economic growth, feed their families better, and conserve natural resources in the face of climate change and other threats. This mission will be achieved through:



Conducting high-quality agricultural research for development in collaboration with the Ministry of Agriculture, and Food Security (MOAFS), civil society institutions, and the private sector;



Generating relevant agricultural technologies and innovations;



Disseminating proven technologies widely to smallholder farmers through partnerships for impact at scale;



Promoting sustainable innovations for food safety and food and nutrition security among smallholder farmers; and



Strengthening market linkages and value chains.

Key achievements

Working together in Malawi, and in collaboration with MOAFS, the CG Centers have accomplished impressive results to date



Supported development and release of seven improved potato and eight orange-fleshed sweet potato varieties with associated seed systems. **Over 350,000 farmers have been trained in production, nutrition, post-harvest handling and marketing** and received clean planting material to diversify cropping systems and enhance incomes, nutrition, and resilience.

Alliance



Bioversity International-CIAT developed 24 improved bean varieties with various attributes. **Partners are actively engaged in promotion, seed production and dissemination to as many farmers as possible.** Complementary integrated crop management technologies have been developed to raise productivity and bean-based food products to improve the nutrition of vulnerable groups.



Developed and supported release of more than 17 drought-tolerant (DT) and nutritious maize varieties. More than 8,000 tons of certified seed have been marketed through agro-dealers in drought prone areas. Conservation agriculture is promoted in combination with DT varieties which **increases maize yield by more than 20% under drought stress.**

Collaboration in Malawi

In 2015, CGIAR decided to pilot a process called 'site-integration' (later renamed as 'country collaboration') in 26 countries. CIP was nominated to initiate the collaboration in Malawi. Site integration aimed to better align CGIAR interventions with Malawi's strategic plans and enhance coordination among Centers in research and development and operations. In February 2016, CIP organized a national consultation workshop with participants from government, the donor community, NGOs, and the private sector. Government departments presented the national and agricultural development priorities and policies, while CGIAR and partners discussed how to align their activities to these priorities in a collaborative manner. Both the government departments and donor community welcomed the commitment by CGIAR to help achieve Malawi's development agenda. As a result, Malawi is now regarded as the most advanced country in terms of CGIAR collaboration.

The CGIAR collaboration was not a new concept for Malawi where several initiatives were already in place. A notable example is the ICRISAT-led Feed the Future Malawi Improved Seed Systems and Technologies (MISST) project (2015-2019). Through this USD 24 million USAID investment, ICRISAT, CIP, IITA and CIMMYT worked with over 40 partners to strengthen seed systems of cereals, legumes and sweetpotato, which directly impacted the lives of 245,000 households with improved seed and other technologies. Irish Aid is also supporting collaborative CGIAR projects in the country with a focus on legumes and root and tuber crops.



OFSP vine beneficiary (photo: CIP)

Following the site-integration workshop, new opportunities for CGIAR collaboration have been developed under CIP's leadership. Since May 2018, the EU-funded and GIZ-supported KULIMA project brings together seven CGIAR Centers to contribute to the implementation of this large Farmer Field School extension program that aims to improve the lives of over 400,000 households. The Centers also jointly contribute to capacity building on integrated technologies and work to strengthen the seed systems of all its crop value chains to enhance farmer access to quality inputs. Since December 2019, the EU is also funding the DeSIRA project in which eight CGIAR Centers work together with the Department of Agricultural Research Services (DARS) and other partners to develop and evaluate new technologies that can sustainably increase the productivity of smallholder farmers in the context of climate change.



Developed several tree-crop agroforestry intercropping technologies for sustainable soil fertility management and resilience to climate change, and protocols for indigenous fruit trees to enhance wide-scale planting for diversified nutrition. **These agroforestry technologies have been scaled up to more than 450,000 farmers.**



Developed 19 crop varieties (12 groundnut, 4 pigeonpea and 3 sorghum) with a pipeline of improved chickpea, pearl and finger millet varieties. Introduced labor reducing equipment, aflatoxin diagnostics and improved agronomic practices. **The Seed Revolving Fund has contributed to 54% of the seed of ICRISAT-promoted crops planted in the country.**



Conducted evidence-based research on key agricultural and food security issues, including extension services, fertilizer policy, food prices and markets, nutrition, resilience, social safety nets, parastatal reform, and trade restrictions. Published related working papers and policy notes.



Developed and promoted numerous improved varieties of cassava and soybean with complementary agronomic practices and processing technologies. Also promoted inoculants (Nitrofix) for enhanced nitrogen fixation and Aflasafe for the control of aflatoxin in maize and groundnut.



Developed improved aquaculture technologies including integrated systems, **implemented holistic ecosystem approaches to fisheries management**, supported the creation of improved fisheries policies, and providing scientific training to partners.

CGIAR in Malawi after COVID-19

The full impact of the COVID-19 pandemic on national and global poverty and food and nutrition security is not yet fully understood. However, it is expected that economic lockdown and restriction on business activities may disproportionately affect smallholder farmers and result in reductions in food consumption and nutritional security of poor households¹. Malawi's farmers also face the additional challenge of partially functioning markets, which will affect their incomes and ability to obtain farm inputs for upcoming growing seasons. There is an increasing realization that COVID-19 may be prevalent, even if a vaccine is developed, which increases the need to institute remedial measures such as improving food and farming systems to increase access to affordable and healthy food.

CGIAR in Malawi is well placed to intensify the long-term strategic efforts to minimize impacts of the pandemic on smallholder farmers' agricultural productivity and market access. Smallholder farmers constitute more than 80% of the economically active population, producing more than 80% of food in the country. Sixty percent of these smallholder farmers are women, who are also the primary caregivers in the rural areas. Efforts to support smallholder agriculture are, therefore, crucial to mitigate the potential shocks to food and nutrition security caused by the pandemic.



Mkalambiri farmer group in Chambwe, Malawi (photo: IITA)

¹ Source: www.ifpri.org/blog/will-covid-19-cause-another-food-crisis-early-review

As CGIAR we propose to contribute our collective strengths in three ways. First, our expert knowledge on a large basket of improved varieties, seed systems, and technologies has a proven record of building resilience to climate change and transforming smallholder farming systems. Second, our integrated and collaborative approaches as ‘One CGIAR’ will ensure that scientific innovations are deployed faster, at a larger scale, and at reduced cost, having greater impact where they are needed the most. Third, through our approach to ‘partnerships for impact at scale,’ we build capacity and collaborate with a wide range of actors, including NGOs, universities, national research and extension services, and the private sector to build, scale and commercialize technology to benefit smallholder farmers. With these three strengths, the consortium of CG centers will build on the existing experience to identify and deploy appropriate integrated technology options with potential to sustainably improve farmers’ incomes and food and nutrition security.



Soybean farmers in Kasungu, Malawi (photo: Daniel Van Vugt)



Tithokoze Farm, Mpingu, Malawi (photo: IFPRI)

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