CGIAR Roundup

Update from the CGIAR Fund Office, May 2014

Research initiatives and discoveries

Five new flagship projects of the CGIAR Research Program (CRP) on Livestock and Fish aim to enhance the links between discovery and delivery to ensure that research results are widely used and benefit the poor.

As part of the CRP on Policies, Institutions and Markets, survey results from the Women's Empowerment in Agriculture Index -- developed to track changes resulting from interventions under the US government's Feed the Future initiative -- show links between the WEAI and poverty, health, and nutrition outcomes.

As part of the CGIAR Research Program (CRP) on Grain Legumes, the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) launched a chickpea genome sequencing initiative and participated in the successful sequencing of the peanut genome, a key step in developing improved varieties (e.g., climate resilient and higher yielding) of these nutritious crops—an important source of protein for the poor.

As part of the CRP on Maize, CGIAR's International Institute of Tropical Agriculture (IITA) is developing high-yielding, stress-tolerant, and adaptable maize varieties for smallholder farmers in the Democratic Republic of the Congo, where there is great potential to improve productivity, incomes and food security.

In response to growing demand from Eastern and Central African countries, the Africa Rice Center, as part of the CGIAR Research Program on Rice, will expand its research and development capacity in the regions.

CGIAR's International Maize and Wheat Improvement Center (CIMMYT) and the International Winter Wheat Improvement Program released 16 new rust-resistant and high-yielding wheat varieties in Central and West Asia, which will contribute to food security in this vulnerable region.

Tools and technology

As part of the CGIAR Research Program on Forests, Trees and Agroforestry, the World Agroforestry Centre (ICRAF) developed computer models that show how agroforestry can repair degraded watersheds, which are important as a water supply, habitat for biodiversity, and source of livelihoods in poor areas.

The CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS) and CGIAR's International Livestock Research Institute helped to develop G-Range, an innovative new tool that simulates how climate change will affect rangelands on which millions of people depend for food and income.

CGIAR's International Rice Research Institute (IRRI), the University of Hohenheim, and GrainPro, Inc. have designed a new, innovative solar rice dryer that is affordable, easy to use, and ideal for rural areas without a power grid or source of electricity, providing numerous benefits for smallholder farmers.

As part of the CGIAR Research Program Policies, Institutions and Markets (PIM), the International Food Policy Research Institute (IFPRI) and International Center for Agricultural Research in the Dry Areas launched Iraq Spatial, an online, open access tool that uses spatial analysis, including climate change data, to assist in precisely targeting food security and development interventions.

Results and impact

Recent articles in *The Economist* highlight the enormous potential impacts from investments in the CGIAR Research Program on Rice and CGIAR's International Rice Research Institute (IRRI), including reducing malnutrition and greenhouse gas emissions, and lifting millions of people out of poverty.

Through the CGIAR Research Program on Dryland Systems, the Center for Agricultural Research in the Dry Areas (ICARDA) introduced new dairy production technologies that reduce processing hours and energy by as much as 75%, improve product quality, and increase the incomes of poor dairy producers in Jordan.

A series of outcome stories highlight work to improve food production through better water management by the former CGIAR Challenge Program on Water & Food. Knowledge and insight from its 12 years of work (2002-2013) have been integrated in the CGIAR Research Program on Water, Land and Ecosystems.

CGIAR's International Crops Research Institute for the Semi-Arid Tropics and Agro-Insight won a Gold Award for Effective Communications for the potential impact of their "Fighting *Striga*" videos in the lives of poor farmers, particularly in semi-arid regions where *Striga* weed can cause up to 80% loss in crops yields.

The real-life impacts of CGIAR's work, demonstrated through a collection of photographs and farmer stories from across the world, are featured in *National Geographic*'s special "Future of Food" series.

The Independent Science and Partnership Council's new impact assessments website, managed by the Standing Panel on Impact Assessment, features significant research findings related to CGIAR impacts, and a "Where is the Evidence?" page.

Publications, videos and other resources

The first issue of the newsletter from the CGIAR Research Program on Integrated Systems for the Humid Tropics highlights emerging results from flagship projects, new publications, and upcoming activities.

A new report by the CGIAR Research Program on Aquatic Agricultural Systems, led by WorldFish, captures the strengths and challenges of agriculture and poverty reduction policies in Cambodia, as well as their effects on crop production and irrigation management.

In its 2013 Annual Report, CCAFS, led by CGIAR's International Center for Tropical Agriculture (CIAT) highlights its work to advance climate-smart agriculture across the world through policy engagement, capacity building, innovative partnerships, effective communications, and breakthrough science.

CGIAR's Bioversity International coordinated a survey of 2,400 smallholder farmers across Bolivia, India, and Nepal, showing that agricultural biodiversity enhances farmers' capacity to adapt to climate change.

The International Potato Center, which leads the CGIAR Research Program on Roots, Tubers and Bananas, partnered with Shamba Shape Up, East Africa's most popular farming TV series, to promote the health benefits and versatility of the orange sweet potato, which is rich in vitamin A. Throughout sub-Saharan Africa, vitamin A deficiency is a leading cause of blindness among young children.

News and events

Following the 2nd Global Conference on Biofortification, organized by HarvestPlus, part of the CGIAR Research Program on Agriculture for Nutrition and Health, global policymakers joined CGIAR in making a commitment to scale up biofortified crops to reach millions of poor people with more nutritious foods.

CCAFS, the Global Research Alliance on Agricultural Greenhouse Gases, and the World Bank held a meeting of leading scientists, practitioners, and financiers to discuss opportunities for reducing agricultural GHG emissions while increasing farmers' food security and resilience to climate change.

On May 5-6, the Forests Asia Summit, organized by CGIAR's Center for International Forestry Research (CIFOR), gathered public and private sector leaders to discuss how to shift to a green economy by better management of forests and landscapes.

The "Building Resilience for Food and Nutrition Security" conference, organized by CGIAR's International Food Policy Research Institute (IFPRI) and its partners and held in Ethiopia from May 15-17, showcased how hunger can be eliminated by 2025 by strengthening resilience to various environmental, political, and economic shocks that threaten food security and livelihoods.

The CGIAR Research Program on Water, Land and Ecosystems hosted a month-long blog discussion on resilience, inviting partners and researchers to take a practical look at how it is evolving from a research concept to a development option and intervention that supports sustainable development.