




# Getting Biofortified Food On Everyone's Plate

**2019 ANNUAL REPORT**



**HarvestPlus**  
Better Crops • Better Nutrition



A photograph of a smiling man, Steven Seremwe, sitting on a metal stool next to a woman who is sitting on the ground. They are both smiling and looking towards the camera. In front of them is a large, shallow, round basket filled with yellow corn cobs and kernels. The man is holding a piece of corn in his hand. They are outdoors in a rural setting with a thatched roof and a brick wall in the background.

“My family loves eating vitamin A maize, and our iron beans are fast cooking. We appreciate the health benefits from eating these crops.”

—Steven Seremwe, Zimbabwe



The Seremwe family receives training on growing biofortified maize and beans as part of the Livelihoods and Food Security Program (LFSP), in which HarvestPlus is a technical partner. LFSP is co-managed by the Food and Agriculture Organization and Palladium, and funded by the UK Department for International Development. **When eaten regularly, the maize provides up to 50 percent of daily vitamin A needs and the beans provide up to 80 percent of daily iron needs.**



Follow these links in the annual report for more information at [HarvestPlus.org](https://www.harvestplus.org).





Dear Friends,

As I write this letter, countries around the world are focused on stemming the COVID-19 pandemic and mitigating its serious impacts. The pandemic also highlights how critical it is for people to get the right nutrition to defend against viruses and other infections, and sustain good health.

For HarvestPlus and our partners, we feel heightened urgency to reach more smallholder farming families and other vulnerable groups in low- and middle-income countries with biofortified crops that are rich in zinc, iron, and vitamin A. These populations are at high risk of micronutrient deficiency, or “hidden hunger,” with outcomes that include stunting, anemia, blindness, even premature death—especially for women and children. Hidden hunger also weakens immune systems, the first line of defense against many viruses and other health threats.

The good news is that momentum has accelerated in global efforts to rapidly scale up cultivation and consumption of micronutrient-rich varieties of rice, wheat, maize, beans, pearl millet, cassava, and orange sweet potato. This Annual Report highlights key results from 2019:

- HarvestPlus-facilitated crops benefitted more than 42 million members of smallholder farming families, up 12 percent from 2018.
- The UK Government and the Bill & Melinda Gates Foundation made significant new multiyear commitments to support biofortification work by HarvestPlus and its CGIAR network and other partners.
- Key donors also continued support for “mainstreaming” biofortification in CGIAR crop breeding programs, with HarvestPlus in a coordinator role.
- The Food and Agriculture Organization (FAO) teamed with HarvestPlus on a biofortification brief to encourage uptake by FAO member countries.
- The World Food Programme integrated biofortification in its local and regional procurement policies.
- Published research expanded biofortification’s evidence base. One study showed iron beans improve women’s ability to conduct everyday physical tasks efficiently, with positive livelihood implications for them and their families.
- Our partnership with the Global Alliance for Improved Nutrition began work to accelerate commercial growth of biofortified foods in several African and Asian countries.

This Report also features a notable nutrition success story: In Rwanda, HarvestPlus helped public and private partners build a sustainable food system for iron-biofortified beans, which are now 20 percent of all beans produced there. HarvestPlus handed over all iron bean activities to Rwandan partners during 2019.

Our objective is to ensure food and nutrition security for families everywhere by making biofortification part of inclusive, healthy food systems. We thank our donors, partners, and stakeholders for their support, and we urge others to engage in this worthy effort. We will all emerge stronger from these challenging times, with renewed conviction to end malnutrition worldwide.

Sincerely,



## HarvestPlus Leadership

Arun Baral  
*Chief Executive Officer*

Adam Mayaki  
*Chief Financial Officer*

Ekin Birol  
*Director, Impact & Strategy*

Wolfgang Pfeiffer  
*Director, Research & Development  
Regional Director, Asia*

Donald Mavindidze  
*Regional Director, Africa*

Marilia Nuti  
*Coordinator, Latin America  
& Caribbean*

Erick Boy  
*Head, Nutrition*

HarvestPlus improves nutrition and public health by developing and promoting biofortified food crops that are rich in vitamins and minerals, and providing leadership on biofortification evidence and technology. HarvestPlus is part of the CGIAR Research Program on Agriculture for Nutrition and Health (A4NH) and is based at the International Food Policy Research Institute (IFPRI).

*On the cover: An Indian mother and her child enjoy biofortified pearl millet puttu and sweet potato sauce, as part of research in rural Andhra Pradesh on how a biofortified food-basket approach can improve nutrition in lactating mothers and their children under two years.*




Staff of HarvestPlus and partners at launch of hybrid zinc maize in Colombia.

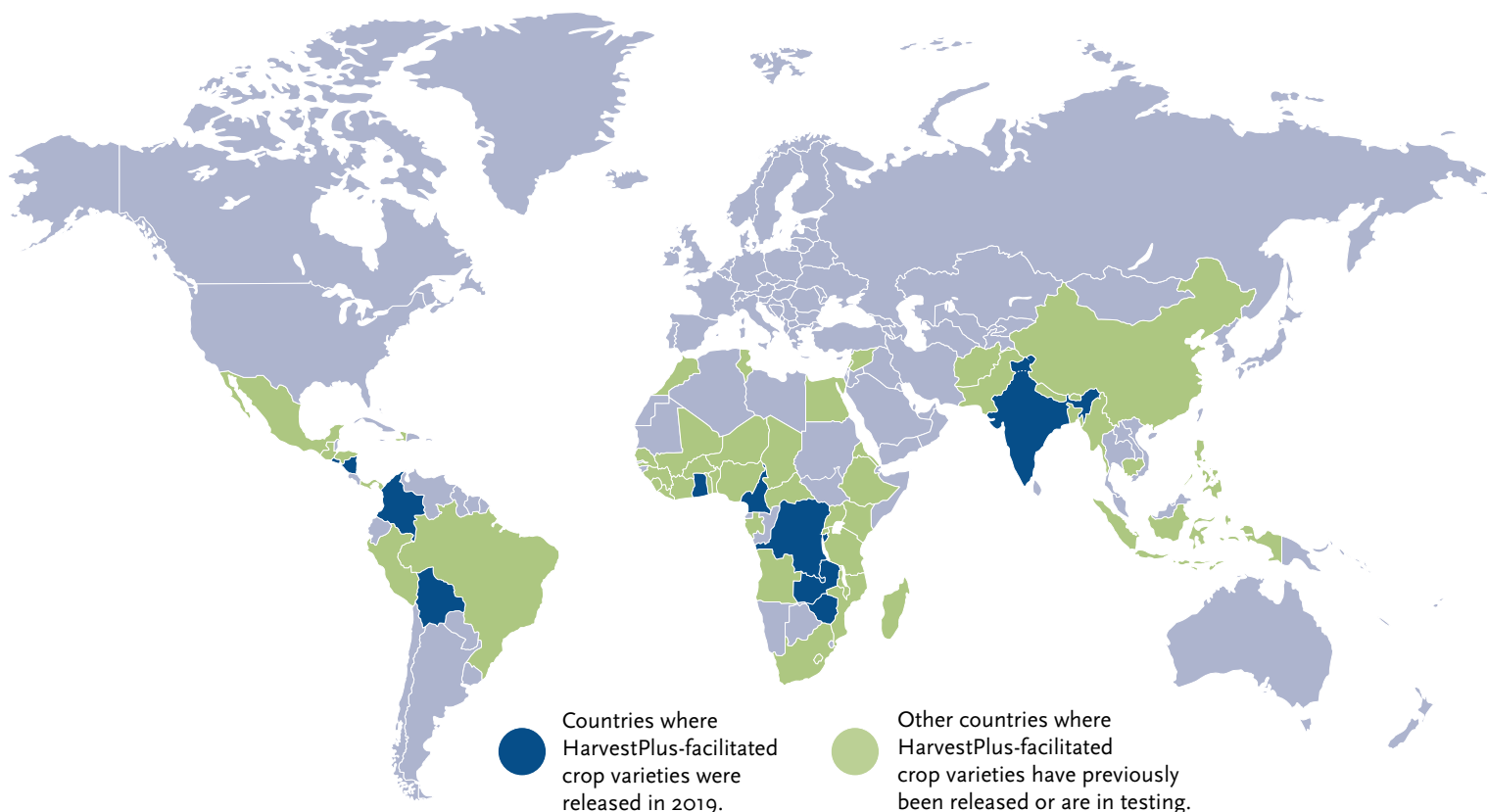
Working with CGIAR research centers, national agricultural research systems, and smallholder farmers themselves, HarvestPlus facilitated the release of 27 new varieties of conventionally bred biofortified crops in 11 countries during 2019. These nutritious crops, biofortified to contain higher levels of iron, vitamin A, or zinc, are also bred to be competitive on yield and other traits demanded by farmers.

The CGIAR breeding center partners of HarvestPlus are: The Alliance of Bioversity International and CIAT; International Crops Research Institute for the Semi-Arid Tropics (ICRISAT); International Institute for Tropical Agriculture (IITA); International Maize and Wheat Improvement Center (CIMMYT); International Potato Center (CIP); International Rice Research Institute (IRRI). **See the Report [back cover](#) for more details.**

## Colombia's Nutritious Food Basket

In Colombia, biofortified varieties released in 2019 included:

- A hybrid zinc maize (*see photo*), developed with CIMMYT. It contains 28 percent more zinc than regular maize, is high-yielding, and disease-resistant, and can be grown at altitude by Colombia's 540,000-plus coffee farming families as a second crop. 
- Colombia's first climbing iron bean variety, developed with the Alliance of Bioversity International and CIAT. Iron deficiency is a major cause of anemia, which affects nearly a third of both pregnant women and children under five in the country.



# ADVANCING NUTRITIOUS CROPS

## HarvestPlus-facilitated biofortified crops released in 2019, by target micronutrient:

(All crops developed with CGIAR research center partners. Number indicates multiple varieties released )

### IRON:

Colombia: *Bean*  
 India: *Cowpea, Pearl Millet*  
 Nicaragua: *Bean*  
 Zimbabwe: *Bean*

### ZINC:

Bolivia: *Rice, Wheat*  
 Colombia: *Hybrid Maize*  
 El Salvador: *Rice*  
 India: *Wheat*

### VITAMIN A:

Burundi: *Plantain*  
 Cameroon: *Cassava*  
 Colombia: *Orange Sweet Potato*  
 DR Congo: *Plantain, Banana*  
 Ghana: *Cassava (4), Hybrid Maize (2)*  
 Zambia: *Hybrid Maize (5)*  
 Zimbabwe: *Hybrid Maize*

## GLOBAL REACH (through 2019)

# 242

HarvestPlus-facilitated crop varieties released in total in 30 countries

# 8.5M

Smallholder farming households growing these biofortified crops

# 42.4M

Total beneficiaries in farming households





A Rwandan farmer tends to her climbing bean crop.

Peer-reviewed, published research conducted in the past 16 years has shown the nutrition and health benefits of biofortified crops, their acceptance by farmers and consumers, and their cost-effectiveness. Studies published in 2019 added to this robust evidence base.

### Iron Beans and Physical Tasks

A study in [Rwanda](#) showed that iron-deficient women who consumed iron beans twice a day for 18 weeks experienced not only improved iron status but also improved ability to conduct everyday physical tasks. This was the first study to show that a food-based nutrition intervention (as opposed to supplements) improved “work efficiency”—the level of energy for performing light tasks. This study, published in the *Journal of Nutrition*, complements previous research in Rwanda showing that consumption of iron-biofortified beans helped improve cognitive and brain function in adult women. [↗](#)

### Vitamin A Orange Sweet Potato’s Lasting Impact

A study in [Mozambique](#), published in the *British Journal of Nutrition*, assessed the impact of the **Reaching End Users (REU)** project that first introduced vitamin A orange sweet potato vines and cultivation training to farmers. Socioeconomic and dietary intake survey data showed that the project had a sustained impact on vitamin A intakes among participating families, three years after the project ended. Since a next generation of children benefitted from the intervention, calculated cost per beneficiary would be lower. [↗](#)





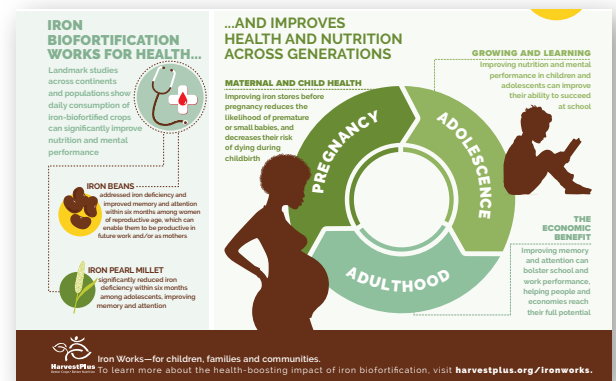
School children in India eat *roti* (flatbread) made with iron-biofortified pearl millet.

## Iron Works...for Health

Iron deficiency—the world’s most common micronutrient challenge—can lead to anemia, impaired mental development and learning capacity, and poor pregnancy outcomes.

HarvestPlus launched the multimedia **Iron Works** campaign in 2019 to highlight the scientific evidence showing how iron-biofortified beans and pearl millet improve nutrition and health, and break intergenerational cycles of malnutrition in mothers and children.

HarvestPlus-facilitated iron bean varieties have been released in 14 countries so far—eight in Latin America and six in Africa. Iron pearl millet has been released in [Niger](#) and [India](#). [↗](#)



Section of an Iron Works infographic

**Iron Works—for children, families, and communities.**  
Learn more at [harvestplus.org/ironworks](https://harvestplus.org/ironworks).





The Mutwales pick up seeds and inputs to grow vitamin A maize.

HarvestPlus and its partners ensure that nutritious crops reach population groups who are at highest risk of hidden hunger, including women, children, and marginalized communities.

## Empowering Refugees

The Mutwales, a family of nine, fled conflict in the Democratic Republic of Congo in 2015 and live in the Meheba refugee camp in [Zambia](#)'s Northwestern province. They are also one of 105 refugee farming families learning to cultivate vitamin A-biofortified maize on small plots in the camp, as part of a livelihoods project funded by the **United Nations High Commissioner for Refugees** and implemented by **CARITAS**. HarvestPlus provides technical

assistance for the vitamin A maize initiative, and links farmers with maize buyers to help them earn income from surplus harvest. [↗](#)

In [Uganda](#), HarvestPlus is partnering with **Self Help Africa** and **AVSI Foundation** on separate projects to reach several thousand refugees with vitamin A orange sweet potato and iron beans. [↗](#)

“I have heard of the many nutrition and health benefits [of vitamin A maize] and I'm very delighted that after harvest, my family will start experiencing them.”

— Luvunzu Mutwale, Meheba refugee camp, Zambia





## Nutrition in the Classroom

To raise nutrition awareness, it helps to start at a young age. In [Bangladesh](#), HarvestPlus has teamed with 18 NGOs throughout the country to visit school classrooms and inform 13-to-15 year old girls and boys about nutrition and the importance of zinc to human health. These students, who mostly live in rural farming areas, also learn about the benefits of zinc rice—information they share with their parents. **The program reached more than 6,000 students in 2019, including 3,500 girls.** [↗](#)

### Zinc Wheat for Bihar's Farmers

Bihar state has [India's](#) lowest level of per-capita income and its highest rate of childhood stunting. Zinc deficiency can contribute to stunting and can also exacerbate the effects of diarrhea, malaria, and lower respiratory infections.

In a project funded by the Bill & Melinda Gates Foundation, two zinc wheat varieties were launched on the market in Bihar in late 2019 to help address zinc deficiency. Research conducted in India has shown that children who eat *roti* (flatbread) made with biofortified zinc wheat suffer fewer days of illness and vomiting. **Zinc wheat is expected to reach more than one million Bihari farming households in the next five years.** [↗](#)

### Prioritizing Women and Children

HarvestPlus is a consortium member in the Enhancing Nutrition Services to Improve Maternal and Child Health in Africa and Asia (**ENRICH**) Programme, recognized on International Women's Day 2019 with an award from the Canadian Partnership for Women and Children's Health (CanWaCH). The award was for contributions to the advancement of global health for women and children while showcasing the power of partnerships. As part of ENRICH, funded by Global Affairs Canada, HarvestPlus helps women farmers and their families in [Bangladesh](#), [Kenya](#), and [Tanzania](#) grow and prepare biofortified crops. [↗](#)





## Engaging Value Chain Partners For Nutrition Success: Rwanda

Rwanda is a small, densely-populated country of 12.7 million. It also has one of the world's highest per-capita rates of bean consumption. The staple is grown throughout the country, primarily by smallholder farming families.

The humble bean has also become a potent solution to a big health problem in Rwanda: **iron deficiency**. It is a leading cause of debilitating anemia, which afflicts 38 percent of Rwandan children under five and 19 percent of women of reproductive age.

In 2010, HarvestPlus teamed the **Rwanda Agriculture Board** and the **International Center for Tropical Agriculture (CIAT)** to develop iron-biofortified beans. They were first released to Rwandan farmers in 2012—and they caught on quickly.

Below are some key statistics (through the end of 2018):

### What is driving success?

For one thing, Rwandan iron beans are not only nutritious but also high-yielding, virus resistant, and heat and drought tolerant—traits that matter to farmers. The government has also supported iron bean delivery with helpful product standards and other regulations.

Equally critical to success, as well as to sustainability, has been the development of robust seed, input, and food value chains for iron beans. HarvestPlus engaged, strengthened, and empowered hundreds of partners along these value chains—a key element of our work in all our program countries.

**The result:** *With iron beans at sufficient scale, HarvestPlus handed over full oversight of a vibrant iron bean food system to Rwandan partners in 2019. This is our definition of success and sustainability.* [!\[\]\(cf531ed27e91483460120fcc057b3901\_img.jpg\)](#)

**20%** of all beans produced in Rwanda were iron-biofortified

**1.8+ million** Rwandans (15% of the population) were eating these nutritious beans

**420,000** farming households were growing iron beans



Our experience in Rwanda was documented in [a video](#) with testimonials from value chain partners:

**Nzeyimana Alexis, bean seed multiplier:**

"When I heard these beans are nutritious and rich in iron, good for children and older people, I chose to invest in them so that not only do we have enough food but also nutritious food."



**Gloriose Musabandi, seed supplier:**

"I started by selling farmers 200 kilograms [of iron bean seeds] per season. Now I am selling 8 tons per season. Sometimes even 8 tons are not enough."



**Ngendahimana Janvier, bean aggregator:**

"Farmers come to me because they know I am a bulk buyer. Then I find markets to sell them in Kigali."



**Jaqueline Mushimiyana, bean farmer:** "I got to know about iron beans at our local agricultural office...the plants have so many branches producing a lot of beans. I also saw change in my child, who looked healthier and weighed very well."



**Thacienne Mukajambo, Kigali bean vendor:**

"Ever since we informed and educated customers [about these beans], that's all they come looking to buy."



**Providence Uware, urban consumer and mother:**

"I feed my children these beans. I prefer them because they are healthier."





AugustSecrets CEO Oluwatoyin Onigbanjo at the Nutritious Food Fair in Nigeria.

## Reaching Across Sectors

Crowding in partners from both the public and private sectors, and building strong alliances between them, is at the core of building sustainable biofortified food systems in low- and middle-income countries. This interplay was on display at the **2019 Nutritious Food Fair**, organized by HarvestPlus [Nigeria](#), on the campus of the International Institute of Tropical Agriculture (IITA) in Ibadan.

On the private sector side, multiple food companies present at the Fair showed how they source vitamin A cassava and other biofortified ingredients from smallholder farms to use in consumer food products. For example, Oluwatoyin Onigbanjo, CEO of food

company AugustSecrets, described how they use biofortified maize and sweet potato in their children's cereal products and also engage a 1 million-strong digital community of mothers to show them the value of nutritious foods. [↗](#)

At the Fair, senior Nigerian government officials also made commitments to advancing the use of biofortified crops and foods to address malnutrition. Senator Bima Enagi Muhammed, Vice Chair of the Senate Committee on Agriculture and Productivity, said, “We must encourage biofortification...We will partner with all relevant stakeholders to ensure that we improve the quality of food that our people eat.” [↗](#)

“AugustSecrets is looking to reduce the rate of malnutrition... We make foods with [biofortified ingredients] that taste amazing, but they’re also good for the body.”

—Oluwatoyin Onigbanjo, CEO, AugustSecrets food company





Chef Ranveer Brar speaks at HarvestPlus event in India

## Biofortified Foods in India

In April 2019, HarvestPlus convened more than 60 Indian business leaders across food supply chains in Delhi to identify sustainable routes to market for biofortified foods and overcome barriers to scaling up. One attendee was CS Jadhav, CEO of natural foods company Inner Being, who said consumer interest in naturally nutritious foods has led to 40 percent year-on-year growth. Well-known Indian chef **Ranveer Brar** is a champion for biofortified foods and spoke at the Delhi gathering. “I am happy to use my influence as a chef to help people learn about cooking with these healthier foods,” he said. [↗](#)

### Going Commercial

HarvestPlus and the **Global Alliance for Improved Nutrition** completed the inception year of their partnership to scale up the commercialization of biofortified crops and foods in six countries across Africa and Asia. The partners have begun work on nine country-level crop delivery plans. For example, in India, they will focus on medium-scale wheat millers and building supply chains in areas with high levels of malnutrition.

### Seeking Blockchain Solutions

HarvestPlus partnered with The New Fork to study ways to use blockchain distributed ledger technology to better track and authenticate biofortified seeds and foods as they move through value chains—a need for both businesses and consumers. The targeted next step was to seek funding for an implementation project in Nigeria focusing on the value chain for vitamin A maize seed. [↗](#)






The CAMFED garden at the Chelsea Flower Show that included biofortified crops. Photo: Simon Bourne.


Several leading organizations incorporated biofortification in key activities and policy guidance during 2019.

### New Commitments Bloom

Among the roses and chrysanthemums at this year's world-renowned Chelsea Flower Show, visitors also got to see iron beans and vitamin A maize in the Campaign for Female Education (CAMFED) garden. **The UK Department for International Development (DFID)**, sponsor of the garden, also announced during the Flower Show a new multiyear commitment to support biofortification research, with part of the funds supporting HarvestPlus. Separately in 2019, the **Bill & Melinda Gates Foundation** renewed its financial support for HarvestPlus' work plan over a four-year period. 


### Global Agencies Advance Nutritious Crops

In November 2019, the **World Food Programme (WFP)** updated its local and regional food procurement policy to include biofortified crop procurement as an objective. WFP has been increasing the share of food procurement it carries out locally. As supplies of biofortified crops become more available in WFP priority countries, the new procurement rules should pave the way for their use in WFP's relief and other activities.

In December 2019, the **Food and Agriculture Organization (FAO)** released a joint technical brief on biofortification with HarvestPlus to “encourage the adoption and scaling up of biofortification through national policies and programs, with collaborative support from FAO and HarvestPlus.” The brief, distributed to FAO staff worldwide, summarizes the latest evidence and implementation lessons, and includes practical guidance on integrating biofortification into nutrition policies and programs. 

In its influential *State of the World's Children* report for 2019, **UNICEF** touted biofortification as an effective strategy for reaching “vulnerable young children living in rural areas with limited access to diverse diets and commercially marketed fortified foods.”

### African Union Ministers Urge High-Level Declaration

At the 2019 Africa Day for Food and Nutrition Security meeting in Cairo, agriculture ministers of the 55 **African Union (AU)** member states recommended to AU heads of state to officially endorse biofortification as an effective approach to address hidden hunger. The AU also hosted an expert consultation on biofortification to develop a framework for implementing it across the continent. 





## Panama Prioritizes Biofortification

Panama's government is prioritizing biofortified crops as part of its Food and Nutritional Security Policy. *Agronutre*, a national biofortification program launched in 2006 in partnership with HarvestPlus, has so far released seven biofortified crop varieties, among them iron beans, vitamin A maize, and vitamin A sweet potato. Panama will look to expand its biofortified food basket with pumpkin, cassava, and cowpea varieties—all requested by farmers. [↗](#)

**Twenty-four countries** had adopted legislation and/or regulations on biofortification by the end of 2019. Governments play a critical role in creating enabling environments; HarvestPlus works with national advocates seeking meaningful policy commitments that will also be adequately funded and implemented.

### Uganda Targets Scale Up

**Uganda** solidified its commitment to scaling up development and delivery of nutritious staple crops with the working launch of the **National Biofortification Technical Working Group** in July 2019. The Hon. Ssempijja Bamulangaki, Minister of Agriculture, Animal Industry and Fisheries,

presided over the launch ceremony. The Working Group provides technical advice, advances enabling frameworks, and supports capacity development. Iron bean and vitamin A orange sweet potato are currently released in Uganda. HarvestPlus' work in Uganda is supported by the United States Feed the Future Initiative. [↗](#)

### Pakistan Makes a Plan

**Pakistan's** Five Year Plans for the National Economy have been in place since 1950, setting development and growth targets and outlining policy strategies to achieve them. In the latest version of the current Plan (2018-2023), biofortification is included in a section on priority nutrition-related activities.



# Governance

The HarvestPlus program is based at the International Food Policy Research Institute (IFPRI) and collaborates with multiple CGIAR centers and partner organizations. The Board of Trustees of IFPRI have delegated the responsibility for oversight of HarvestPlus to a Program Advisory Committee (PAC), which acts in effect as the Board of Trustees for HarvestPlus.\*

## **PAC Chair**

Andrew Natsios  
*Director of the Scowcroft Institute of International Affairs and Executive Professor, Bush School of Government and Public Service, Texas A&M University*

## **PAC Members**

Esi Foriwa Amoafu  
*Director of Nutrition, Ghana Health Service*

Jeroen Bordewijk  
*Senior Vice President (Retired), Unilever Corporation, Supply Chain Excellence Programme, Netherlands*

Ken Noah Davies  
*Director (Retired), Purchase for Progress, World Food Programme*

Ismahane Elouafi  
*Director General, ICBA*

Shenggen Fan  
*Former Director General, IFPRI*

Richard (Dick) Flavell  
*Chair, Science and Impact Executive Board, International Wheat Yield Partnership, Texas A&M University*

David Governey  
*Corporate Governance and Risk Management Consultant*

Andrew M. Prentice  
*Head, MRC International Nutrition Group, London School of Hygiene & Tropical Medicine, UK; Head, MRC Keneba, The Gambia; Theme Leader for Nutrition, The Gambia*

Amitava (Amit) Roy  
*Agricultural Sector Development Consultant*

Margret Thalwitz  
*Board Chair, International Center for Agricultural Research in the Dry Areas (ICARDA)*

Joe Tohme  
*Research Director, CIAT Agrobiodiversity Programs*

Barbara Wells  
*Director General, International Potato Center*

## **Designated Representative to the PAC**

Lawrence Kent  
*Senior Program Officer, Agricultural Development, Bill & Melinda Gates Foundation*

\*PAC membership as of the October 2019 PAC meeting at HarvestPlus headquarters.

# Thank You, Howdy Bouis!




The HarvestPlus family extends its deep gratitude and best wishes to Howarth “Howdy” Bouis, who retired from the program at the end of 2019. Howdy, who shared the 2016 World Food Prize for his seminal efforts to

advance biofortification, joined the International Food Policy Research Institute (IFPRI) as a researcher in 1982 in what was then the Food Consumption and Nutrition Division. In 1993, he began his advocacy and fundraising efforts for biofortification, and in 2003 he launched HarvestPlus, originally as a joint cooperative agreement between IFPRI and the International Center for Tropical Agriculture (CIAT).

Much of the progress in biofortification since then is due to Howdy’s intense passion for this innovative

response to hidden hunger, and his tenacity in the face of initial doubts within the agriculture and nutrition communities. Now living in the Philippines, Howdy continues to rally actively for biofortification—as an oft-quoted expert, conference speaker, author, member of the African Leaders for Nutrition, and persuasive advocate.

In an interview published on the HarvestPlus website around the time of his retirement, Howdy pinpointed the primary task at hand in the years ahead: “A release [of a biofortified crop variety] doesn’t mean it is taken up. That’s a huge job that we have—to catalyze biofortified food systems.”

HarvestPlus is committed to serving this catalytic role and we will benefit immensely from Howdy’s ongoing role as a biofortification champion and thought leader. 



# 2019 Financials

## Receipts and Disbursements

(in million US\$)

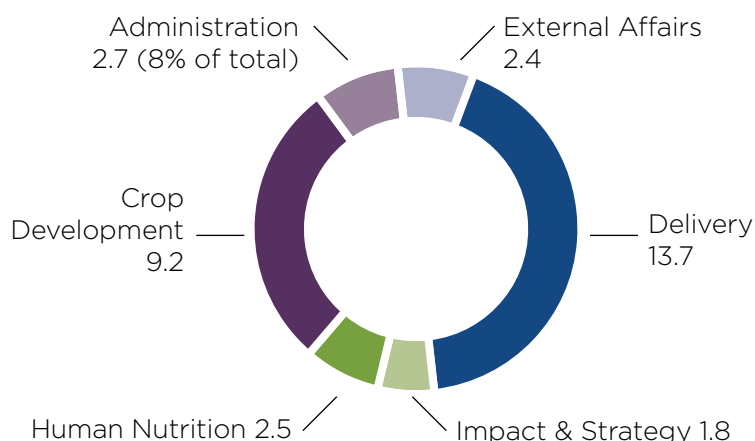
### Receipts

Grants and Contracts	24.989
Interest Income	.466

Total Receipts 25.455

**Total Disbursements 32.305**

## Disbursements by Category



## 2019 Donors to HarvestPlus

Australian Department of Foreign Affairs and Trade

The Bill & Melinda Gates Foundation

CGIAR Research Program on Agriculture for Nutrition and Health (A4NH)

MacArthur Foundation

UK Department for International Development

United States Feed the Future Initiative

## HarvestPlus Partners List

We are proud to work with hundreds of partners around the world to achieve our shared goal of improving nutrition, health, and livelihoods. To partner with HarvestPlus, email us at: [harvestplus@cgiar.org](mailto:harvestplus@cgiar.org)

### CG CENTERS

International Center for Agricultural Research in the Dry Areas (ICARDA)  
The Alliance of Bioversity International and CIAT  
International Crops Research Institute for the Semi-Arid Tropics (ICRISAT)  
International Food Policy Research Institute (IFPRI)  
International Maize and Wheat Improvement Center (CIMMYT)  
International Potato Center (CIP)  
International Institute of Tropical Agriculture (IITA)  
International Rice Research Institute (IRRI)

### UNIVERSITIES & OTHER RESEARCH ORGANIZATIONS

British Nutrition Foundation  
Children's Hospital Oakland Research Institute-CHORI  
Chinese Academy of Agricultural Sciences (CAAS)  
Cornell University  
Emory University  
Ethiopian Institute of Agricultural Research (EIAR)  
Flinders University  
French Agricultural Research Centre for International Development (CIRAD)  
Indonesian Center for Rice Research (ICRR)  
Johns Hopkins University  
Newcastle University  
PATH

Punjab Agricultural Research Board (PARB)  
Purdue University  
Sabanci University  
University of California, Davis  
University of Melbourne

### GLOBAL PARTNERS

Cropin  
Dalberg  
Development Practice  
Euromonitor International  
Global Alliance for Improved Nutrition  
Leatherhead Food Research  
Precision Agriculture for Development  
The New Fork  
The Partnership Initiative

### IN-COUNTRY PARTNERS

**BANGLADESH**  
Agrani Trading  
Agricultural Advisory Society (AAS)  
Ali Seed Farm  
Amra Kaj Kori (AKK)  
AVA Development Society  
Bangladesh Rice Research Institute (BRRI)  
Bhai Bhai Traders  
Friends in Village Development  
Bangladesh (FIVDB)  
Global Alliance for Improved Nutrition (GAIN)  
Kobadak Enterprise  
Mother Seeds & Agro Industries Ltd.  
National Agricare  
Naton Zibon Rochi (NAZIR)  
Prokash Gano Unnayan Kendra (PGUK)

RDRS Bangladesh  
Society Development Committee (SDC)  
Shariatpur Development Society (SDS)  
Shawdesh Unnay Kendra (SUK)  
South Bengal Seed Association  
Thengamara Mohila Sabuj Sangha (TMSS)  
Ushi Seeds  
Uzirpur Organic Multipurpose Co-operative Society Ltd  
Voluntary Rural Development Society (VRDS)  
World Vision Bangladesh

### BOLIVIA

Integral Agricultural Cooperative (CAISY Ltda)

### BRAZIL

Agência Estadual de Pesquisa Agropecuária e Extensão Rural do Maranhão (AGERP)  
Associação dos Agricultores do Canto do Buri, PI  
Associação Regional das Escolas Famílias Agrícolas do Piauí (AEFAP)  
Câmara Intersetorial de Segurança Alimentar e Nutricional do Estado do Maranhão  
Câmara Municipal de São Mateus do Maranhão  
Centro de Apoio e Promoção da Agroecologia (CAPA)  
Centro de Tecnologia de Embalagem do Instituto de Tecnologia de Alimentos (CETEA/ITAL)  
Centro Universitário de Sete Lagoas (UNIFEMM)  
Companhia de Desenvolvimento dos Vales do São Francisco e do Parnaíba (Codevasf)  
Companhia Nacional de Abastecimento (CONAB), regional do Maranhão

Conselho Estadual de Segurança Alimentar e Nutricional do Estado do Maranhão (CONSEA-MA)  
Cooperativa Agropecuária dos Agricultores Familiares (Cooperfamiliar)  
COOSERT – Cooperativa de Serviços Técnicos de Coroatá-MA  
Embrapa  
Empresa de Assistência Técnica e Extensão Rural: Goiás (EMATER-GO); Minas Gerais (EMATER-MG);  
Piauí (EMATER-PI); Rio de Janeiro (EMATER-RJ);  
Rio Grande do Sul (EMATER-RS)  
Empresa de Pesquisa Agropecuária do Estado do Rio de Janeiro (Pesagro-RIO)  
Empresa Mato-grossense de Pesquisa, Assistência e Extensão Rural (Empaer)  
Escola Superior de Agricultura "Luiz de Queiroz" (ESALQ/USP)  
Escritório Regional Emater (Ijuí & Santa Rosa)  
Escritório Unidade Indígena Emater Tenente Portela  
Fundação Dom Edilberto, PI  
Fundação para o Desenvolvimento Científico e Tecnológico (Fundetec)  
Fundação Santa Angela, PI  
Instituto Federal de Educação, Ciência e Tecnologia (Codó, MA; Farroupilha, Campus Santa Rosa & Campus Santo Augusto  
Instituto Federal do Triângulo (Inconfidentes; Mineiro de Bambuí; Pomba)  
Movimentos dos Pequenos Agricultores (MPA)  
Prefeituras de Ararí, MA; Capim Branco, MG; Cascavel, PR; Codó, MA; Coroatá, MA;



Corumbá, MS; Guaraniáçu, PR; Itabirito, MG; Itaguaí, RJ; Magé, RJ; Monte Carmelo, MG; Patrocínio, MG; Pinheiral, RJ; Presidente Dutra, MA; Regeneração, PI; Santa Vitória, MG; Santo Antônio dos Lopes, MA; São Gabriel do Oeste, MS; São Miguel do Oeste, SC; Sete Lagoas, MG; Tanque, PI; Timon, MA; Urbano Santos, MA; Viana, MA; São João do Soter, MA

Rede ECOVIDA, Núcleo Missões

Secretaria Adjunta de Segurança Alimentar e Nutricional do Maranhão

Secretaria de Agricultura do Município de Caxias-MA & Timbiras-MA

Secretaria de Agricultura Familiar do Maranhão

Secretaria de Comunicação da Embrapa

Secretaria de Desenvolvimento Agropecuário e da Pesca do Pará (Sedap)

Secretaria de Estado da Agricultura e do Desenvolvimento Agrário, da Educação de Sergipe

Secretaria de Estado da Inclusão, assistência e do Desenvolvimento Social de Sergipe

Secretaria de Estado do Desenvolvimento Social do Maranhão

Secretaria de Negócios da Embrapa

Secretaria de Relações Internacionais da Embrapa

Secretaria do Estado da Saúde de Sergipe

Secretaria Estadual de Educação e Cultura do Estado do Piauí

Secretaria Extraordinária de Estado da Igualdade Racial do Maranhão

Secretaria Municipal de Agricultura Pecuária e Pesca Abastecimento de Alto Alegre

Sindicato dos Agricultores (Eliseu Martins & Queimada Nova, PI)

Sindicatos dos Trabalhadores e Trabalhadoras Rurais de Coratá-MA

Sociedade Educacional Três de Maio, RS

Universidade Estadual (Campinas; Maranhão; Paulista)

Universidade Federal (Sergipe; Uberlândia; Viçosa; Maranhão; Mato Grosso; Rio de Janeiro; Rio Grande do Sul, Unidade Três Passos; Fronteira Sul, Campus Cerro Largo

## COLOMBIA

Afacocuy Association

Asogrocar Association

Association of Agronomists of the Atlantic Canal del Dique Foundation

Ceprodet

Cepromegua Guaviare

Colombian Agricultural Research Corporation (AGROSAVIA)

Córdoba University

Del Valle University

Food and Agricultural Organization (FAO)

Fedearroz

Guerrero Seeds

Javeriana University

Latin American and Caribbean Consortium to Support Research and Development of Cassava (CLAYUCA)

Maxisemillas

Ministry of Health

National Federation of Cereal and Leguminous Plants Growers – FENALCE

National Federation of Coffee Growers

Paso Colombia Foundation

PNUD

Secretary of Agriculture (Génova- Quindío; Jamundí – Va)

Secretary of Economic Development (Cerrito – Valle)

SENA – Agribusiness Buga

UMATA (Candelaria; Cumbitara; Guayatá; Pradera; Tenerife – Magdalena; Versalles)

Valle del Cauca Government

World Food Programme (WFP)

## DR CONGO

AGRIFORCE

APAEKA

Association Coopérative en Synergie Féminine (ACOSYF)

Association des Agronomes Professionnels (AGROPRO)

Association des Femmes Paysannes de Gimbi (AFPG)

Association pour le Développement de l'Élevage et de l'Agriculture (ADEA)

Bukavu Youth Agripreneurs (BYA)

Centre d'Adaptation et de Production de Semences Améliorées (CAPSA) – Lohutu

Centre pour la Promotion Rurale (CPR) – IDJWI

Communauté locale de développement de Nkolo (CLD-Nkolo)

ELIORE

ETHN-Agrobusiness

FABIS

Ferme Kaloboka (FERKAL)

FODDR

Food for the Hungry

Groupe Agro-Pastoral de Kivu (GAP)

IITA Youth Agripreneurs/Kalabo

Institut Facultaire d'Agronomie (IFA) de Yangambi-WAVE

Institut National pour l'Etude et la Recherche Agronomiques (INERA)

Institut Technique Agricole de Katanga (ITAK)

Initiatives pour la Promotion des Démunis (IPD)-Buzi Bulenga

Institut Supérieur Technique de Développement (ISTD)/Kalehe

Laboratoire de Recherche en Biofortification, Défense et Valorisation des Cultures (BIODEV)

Layuka Sprl

Mercy Corps – FSP

Plantation Bakulikira

Programme National de Nutrition (PRONANUT)

Radio Communautaire de Kinzau-Mvuete

Radio Télévision Nationale Congolaise (RTNC)

SAFARI INTERNATIONAL – SOD

Service National de Semences (SENASEM)

Service National de Vulgarisation (SNV)

UFEDI

Union pour l'Emancipation des Familles Autochtones (UEFA)

Université de Lubumbashi (UNILU)

Université Evangélique en Afrique (UEA)

## EL SALVADOR

Food and Agricultural Organization (FAO)

National Center of Agricultural, Livestock and Forestry Technology "Enrique Álvarez Córdova" (CENTA)

World Food Programme (WFP)

## GUATEMALA

Food and Agricultural Organization (FAO)

Foundation of Coffee Farming for Rural Development (Funcafé)

Fundación para la Innovación Tecnológica Agropecuaria y Forestal (FUNDIT)

Institute of Agricultural Science and Technology (ICTA)

Institute of Nutrition of Central America and Panama (INCAP)

Inter-American Institute for Cooperation on Agriculture (IICA)

Members of the BioFORT Platform

Ministry of Agriculture, Livestock and Food (MAGA)

Semilla Nueva

World Food Programme (WFP)

World Vision International (WVI)

## HAITI

Catholic Relief Services (CRS)

CHIBAS Foundation

Ministry of Agriculture (MARNDR)

Ministry of Public Health and Population (MSPP)

Organization for the Rehabilitation of the Environment (ORE)

Project AKOSAA/University Laval

Program School Food (PNCS)

## HONDURAS

CARE

Catholic Relief Services (CRS)

Comisión de Acción Social Menonita (CASM)

Directorate of Agricultural Science and Technology (DICTA)

Fundación de Investigación Participativa de Honduras (FIPAH)

Inter-American Institute for Cooperation on Agriculture (IICA)

Mesas de Seguridad Alimentaria y Nutricional (SAN)

Panamerican School of Agriculture, Zamorano

Programa de Reconstrucción Rural (PRR)

SwissContact

TechnoServe (TNS)

World Food Programme (WFP)

## INDIA

Aarti Flour Mill

Action for Social Advancement – ASA

Ajeet Seeds Limited

Ankur Seeds

Annadata Farmer Producer Company Ltd

Atmanirvar Farmer Producer Company

Bagaha Krishak Agro Producer Co.

Banaras Hindu University

Bandedham Agroproducer Company

Bapudham Smridhi Agro Producer Co.

Basant Agrotech (I) Ltd

Bayer BioScience Pvt. Ltd.

Bhartiya Lok Vikash Evam Shodh Sansthan (BLVESS)

Bihar Agricultural University

BIOECO Farmer Producer Company

Bioseed Research India Pvt. Ltd.

Bombay Super Hybrid Seeds

Borlaug Institute for South Asia – BISA

Buxar FPC Limited

CCS Haryana Agricultural University

Cereal System Initiative for South Asia (CSISA)

Corteva

Daftari Agro Biotech Pvt. Ltd.

Delta Agri Genetics

Dhule College of Agriculture

Dumraon Agro Producer Company

G.B. Pant University of Agriculture and Technology (GBPUAT)

Gandhar Agro Tech Farmer Producer Company

Ganga Kaveri Seeds Pvt. Ltd.

Gramin Development Services (GDS)

GUEVVS – Gramin Uthan Evam Vaikalpik Vikas Samiti

Gurua Agro Producer Company

Hytech Seed India Pvt. Ltd.

All India Coordinated Research Project on Pearl Millet (ICAR – AICRP)

ICAR – Indian Agricultural Research Institute (IARI)

Indian Institute of Wheat and Barely Research Institute (ICAR-IIWBRI)

ICAR – RCER-Patna & KVKs

Indian Institute of Rice Research (ICAR-IIRR)

India Biofortification Program

Indian Agricultural Research Institute (ICAR)

Indira Gandhi Krishi Vishwavidyalaya (IGKV)

Indo Gulf

ITC Limited

JEEVIKA

JK Agri Genetics Limited

Junagadh Agricultural University

Karnataka State Seeds Corporation Limited (KSSC)

Kartik Bio Seeds

Kausalya Foundation

Kaveri Seeds Co. Ltd.

Khistiz Agro Tech Private Limited

Koshi Agro Biotech Private Limited

Maa Annapurna Farmer Producer Company

Maa Gayatri Farmer Producer Company

Maharashtra State Seeds Corporation Ltd. (MSSC)

Mahatma Phule Krishi Vidyapeeth (MPKV)

Mahyco

Maner Sangam Farmer Producer Company

Marthwada Agricultural University

Masourhi Farmer Producer Company

Metahelix Lifesciences Pvt. Ltd.

Ministries of Agriculture, Health, and Education

Moti Seeds

Nath Biogene Pvt. Ltd.

National Institute of Nutrition (NIN)

National Seed Association of India (NSAI)

Nidan

Nirmal Seeds Pvt. Ltd.

Nu Genes Private Limited

Nuziveedu Seeds Pvt. Ltd.

Orissa University of Agriculture and Technology (OUAT)

Patliputra Farmer Producer Company

Pradan

PRAN

Prof. Jayashankar Telangana State Agricultural University (PJTSAU)

Punjab Agricultural University (PAU)

Rajendra Prasad Central Agricultural University – (RPCAU)

Rasi Seeds

Ratnagiri Seeds & Farm

Reliance Foundation

Sahyogi Agro Producer Company

Shakti Vardhak Hybrid Seeds Pvt. Ltd.

Shiv Shakti Seeds

Sone Ganga Seeds

Sood Seeds

Sri Karan Narendranath Agricultural University

Sri Sai Seeds

Sunagro Seeds Private Limited

Sustainable Human Development Association (SHDA)

Swami Keshwanand Rajasthan Agricultural University

Syngenta Foundation

Taal Farmer Producer Company

Tamil Nadu Agricultural University (TNAU)

TCL – Trust Community Livelihood

Tempest Advertising Pvt. Ltd.

The Coalition for Food and Nutrition Security (CFNS)

Vasantrao Naik Marathwda Krishi Vidyapeeth

Parbhani (VNMKV)

Wheat Berry Agro Tech (WBAT)

## KENYA

Bubayi Products

East Africa Seed Company

Equatorial Nuts Ltd.

Global Alliance for Improved Nutrition (GAIN)

Jomo Kenyatta University of Agriculture and Technology

Kenya Agricultural & Livestock Research Organization (KALRO)

Nutrition International

One Acre Fund

Pan-Africa Bean Research Alliance (PABRA)

World Food Program (WFP)

World Vision Kenya

## MALAWI

Africa Fertilizers and Agribusiness Partnership (AFAP)

Blessings Hospital

Clinton Development Initiative

COMSIP Union

CP Foods

CPM Agri-Enterprises

Department of Agricultural Extension Services (DAES)

Department of Agricultural Research Services (DARS)

Department of Nutrition, HIV & Aids (DHNA)

Ekweneni Hospital Aid Support Unit

Farmers Union of Malawi

Focus

Food and Agriculture Organization (FAO)

GiZ

Global Seeds

Irish Aid

Japanese Fund for Social Development

Lilongwe University of Agriculture and Natural Resources (LUANAR)

Malawi Prison Farms

Ministry of Education School Feeding Program

Mphalabungo CBO

Multi Seeds Company

Mwanza District Council DEC

Nascent Solutions

Ntchisi District Council Dec (DAEC & DNCC)

Perisha Agro

Seed Co Malawi Ltd

Seed Tech

Total Land Care

USAID

Virelishama Seed Company

World Bank

## NICARAGUA

Apta (high-quality) Seed Producers

Asilo de Ancianos de Chaguitillo

Caritas-Matagalpa

Catholic Relief Services (CRS)

Central American University (UCA)

Community Seed Banks

Fabretto Foundation

Foundation for Research and Rural Development (FIDER)

Nicaraguan Institute of Agricultural Technology (INTA)

Nitlapan from the UCA

ODESAR

Programa Campesino a Campesino (PCaC) from the Unión Nacional de Agricultores y Ganaderos (UNAG)

Pueblo Indígena Totogalpa

Sanseco project

Self Help International

Semillas Mejoradas S.A. (SEMSA)

TeSac Tuma-La Dalia



Unión de Campesinos Organizados  
de San Dionisio (UCOSD)  
World Food Programme (WFP)

## **NIGERIA**

4-Media Solutions  
AAEC Foods  
Accelerating Nutrition Results  
in Nigeria (ANRiN)  
Adamawa State Agricultural Development  
Programme  
Adefunke-Desh Variety Stores  
Agricultural Transformation Agenda  
Support Program (ATASP)  
Agriculture Graduates Association  
of Nigeria (AGAN)  
AgroShop  
Ahalson Nig. Limited  
Akwa Ibom State Agric Dev Programme (AKADEP)  
Akwa Ibom State University (AKSU)  
Alliance for Green Revolution in Africa (AGRA)  
Almat  
American University of Nigeria  
Amuludun FM 99.1 Ibadan  
Anambra Agric Dev Programme (ASADEP)  
Anambra State Polytechnic  
Ashoka  
August Secrets  
Bauchi State Agricultural  
Development Programme  
Benue State Agric Dev Programme (BNARDA)  
Borno State Agricultural  
Development Programme  
Cassava Growers Association  
of Nigeria (CGAN)  
Cassava Processors Association  
of Nigeria (CAPAN)  
Cato Foods  
Central Bank of Nig. Minna Branch  
Cross River State Agric Dev Programme (CRADP)  
Crowther Foods  
Cultivating New Frontiers in Agriculture (CNFA)  
DABOL  
Daily Independent  
Dala Foods  
Dangote Foundation  
Development Dynamics  
Dizengoff Nigeria  
Dominican Centre for Human  
Resource Development (DCHRD)  
Doreo Partners  
Ebonyi State Agric Dev Programme  
ENVOY Agricultural Services  
FADAMA III  
Farm Best International  
Federal College of Agriculture, Akure (FECA)  
Federal Ministry of Agriculture and  
Rural Development (FMARD)  
Federal Ministry of Budget  
and National Planning  
Federal Ministry of Education  
Federal Ministry of Health (FMoH)  
Federal Ministry of Trade and Investment  
Federal Radio Corporation of Nigeria (FRCN)  
Food and Agriculture Organization (FAO)  
Forward Africa  
Fresh FM 105.9 Ibadan  
Friesland Campina WAMPCO  
GIZ  
Global Alliance for Improved Nutrition (GAIN)  
Gold Agric  
Gombe State Agricultural Development  
Programme  
GraceCo Nigeria Limited  
Green Nigeria FM, Abuja  
Greenspire Seeds  
Greetings FM 105.7/Green Radio Abuja  
Habgito Nig. Limited  
Home Grown School Feeding  
Programme (HGSFP)  
Human Empowerment and  
Development Project (HEMADEP)  
IFAD Cassava Value Chain Development  
Project - Anambra, Ebonyi, Niger,  
Taraba, Ogun, Benue  
Imo State Agric. Dev Programme (IMOADP)  
International Fertilizer Development  
Center (IFDC)  
Iswe-Oluwa Foods  
Japan International Cooperation Agency (JICA)  
Jessy Ojoma Drive for Environmental  
Development Foundation (JODED-F)  
Jifatu Foods

Jigawa Agriculture & Rural  
Development Authority (JARDA)  
Jirku Seeds  
Justice Development and Peace  
Commission (JDPC) Uyo  
Justice Development and Peace  
Movement (JDPM) Oyo  
Kaduna State Agricultural Development Project  
Kagara Local Government Council  
Agriculture Dept.  
Kebbi State Agricultural and Rural  
Development Authority (KARDA)  
Kebbi State Ministry of Agriculture &  
Rural Development  
King FM 103.9 Ibadan  
Kolping International  
Langai Farms Nig. Ltd. Keffi  
LORYB  
Maina Seeds  
Maize Association of Nigeria (MAN)  
Maize Growers, Processors and Marketers Associa-  
tion of Nigeria (MAGPAMAN)  
Mamora Seeds  
Maslaha Seeds  
Medugu Farms  
Ministry of Agriculture (Kaduna; Niger;  
Sokoto; Taraba)  
Miraj Nig. Ltd  
Nalmaco Nigeria Ltd  
National Agricultural Extension &  
Research Liaison Services (NAERLS)  
National Agricultural Seed Council, Abuja  
National Directorate of Employment (NDE)  
National Orientation Agency (NOA)  
– Regional (North Central)  
National Root Crops Research Institute  
(NRCRI), Umudike  
Nestle  
Newage Solutions  
News Agency of Nigeria  
Niger State Agricultural and Mechanisation  
Dev Agency (NAMDA)  
Niger State Ministry of Gender Affairs  
Niger State Ministry of Agriculture & Rural Dev.  
Niji Lukas Nigeria Limited (Niji Foods)  
Obafemi Awolowo University (OAU),  
Osun State  
Obed Photography  
Oyo State Agric Dev Programme (OYSADEP)  
Pacific Ring West Africa  
Premier Seed  
Premier Tropicana  
Promasidor  
Redeemed Aids Programme Action  
Committee (RAPAC) – Benue State  
Rhythm FM, Abuja  
Rotary  
Salamun KMR Seeds  
Saleh Soba and Sons Ltd  
Savannah Seeds  
Scaling Up Nutrition (SUN) Business Network  
SEEDAVEST  
SeedCo  
Seed Peers  
Sen. Adeyemo Women Empowerment  
Coop (SAWEC)  
Sokoto State Agricultural Development  
Programme  
Space FM 90.1 Ibadan  
Techniseed  
TechnoServe  
The Guardian  
The Nations  
ThisDay Newspaper  
Tiger Farms Nig. Ltd  
Tukunyar Gwari Nig. Ltd  
University of Abuja  
University of Ibadan – Oyo State  
Value Seed  
WUL Nigeria Ltd.  
Zuba Farmers Market Maize Actors

## **PAKISTAN**

Advance Seed Corporation, Tando Allah Yar  
Al Shamas Seed Corporation, Liaquat Pur  
Alzaraun Seed Corporation, Bahawalpur  
Ayub Agricultural Research Institute, Faisalabad  
Bhugio Seed Corporation, Mirpur Khas  
CKD Seeds, Gujranwala  
Family's Farm Foods, Lahore  
Fatima Fertilizer Company Limited  
Fauji Fertilizer Company Limited  
Federal Seed Certification &  
Registration Department (FSC&RD)

Ghani Seeds, Bahawalnagar  
JB Seed Corporation, Liaquat Pur  
Jullundur Seed Corporation, Rahim Yar Khan  
Ministry of National Food Security & Research  
Ministry of National Health Services,  
Regulation and Coordination  
Ministry of Planning, Development and Reform  
MNS Agriculture University, Multan  
National Agricultural Research Center (NARC)  
National Agricultural Research System (NARS)  
Neelam Seed Corporation, Multan  
Pakistan Agricultural Research Council  
(PARC), Islamabad  
Pakistan Floor Mills Association  
PMAS Arid Agriculture University, Rawalpindi  
Punjab Seed Corporation  
Resham Seed Corporation, Rahim Yar Khan  
Scaling Up Nutrition (SUN)  
Shan Seeds, Khanewal  
Shoab Seed Corporation, Sukkur  
Tara Group of Companies Seed, Lahore  
TASSCO, Tando Alla44h Yar  
Trigon Int. Multan  
4-Brothers, Lahore

## **PANAMA**

Agricultural and Livestock Research  
Institute of Panama (IDIAP)  
Food and Agricultural Organization (FAO)  
Ministry of Agricultural Development  
Ministry of Education  
Ministry of Health  
Ministry of Social Development  
National Secretary for National Food Program  
Panama University  
Patronato de Nutrición  
Specialized Analysis Institute  
World Food Programme (WFP)

## **RWANDA**

African Evangelistic Enterprise Rwanda (AEE)  
Association François-Xavier Bagnoud  
Rwanda (FXB)  
Caritas-Rwanda – Gimbuka Project  
Clinton Development Initiative (CDI)  
FarmFresh  
Food for the Hungry (FH)  
Garden for Health International (GHI)  
Global Communities  
Howard G. Buffett Foundation  
Project/MINAGRI  
Ministry of Agriculture and Animal  
Resources (MINAGRI)  
National Early Childhood  
Development Program  
One Acre Fund  
Rwanda Agriculture Board (RAB)  
World Food Programme (WFP) (FtMA Project)

## **TANZANIA**

Ministry of Agriculture  
Ministry of Education  
Global Alliance for Improved Nutrition (GAIN)  
Nutrition International  
Office of the Prime Minister  
Provincial Governments (Central, Lake Zone,  
Southern Highlands, Kagera)  
Tari  
World Vision Tanzania

## **UGANDA**

Africa 2000 Network (A2N)  
BioCrops (U) Limited  
Byeffe Foods  
Catholic Relief Services (CRS)  
Caritas – Hoima Diocese  
Central Broadcasting Station (CBS)  
Community Enterprise Development  
Organization (CEDO) Seeds  
Divine Organic Foods  
Farm Africa  
Farm Radio International  
Isimba Prison Farm  
Korean Friend of Africa  
Kigarama Cooperative and Marketing Society  
Makerere University, Department of  
Agricultural Production, College of  
Agricultural and Environmental Sciences  
Mbarara University – Healthy Child  
Uganda Project  
Ministry of Agriculture, Animal  
Industry and Fisheries  
Ministry of Health  
Mercy Corps

National Agricultural Research  
Organization (NARO)  
National Crops Resources Research  
Institute (NaCRRI)  
New Vision  
Office of the Prime Minister  
Olilim Cooperative Society  
Peace Corps  
Pearl Seeds  
NASECO Seeds  
SASAKAWA Global 2000  
Self Help Africa  
Samaritan's Purse  
Senai Biosciences  
Send a Cow  
Volunteer Efforts for Development  
Concerns (VEDCO)  
World Vision Uganda

## **ZAMBIA**

Advanta Seed  
AfriSeed  
AgResults  
Butemwe Milling  
Care International  
Caritas  
Chimusoro Milling  
Choma Milling  
Civil Society Organisation on Scaling  
Up Nutrition (CSO-SUN)  
Concern WorldWide  
Development Aid from People to  
People (DAPP)  
Fanyate Milling  
FVG Milling  
Indaba Agricultural Policy Research  
Institute (IAPRI)  
Kamano Seed  
Ministry of Agriculture  
Ministry of Education  
Musanza Milling  
Mushe Milling  
National Food and Nutrition  
Commission (NFNC)  
National Institute for Scientific and  
Industrial Research (NISIR)  
NutriAID  
Peace Corps  
Programme Against Malnutrition (PAM)  
Scaling Up Nutrition (SUN) Business Network  
Seba Foods  
SeedCo  
Self-Help Africa (SHA)  
SHAIS Foods  
Star Milling  
Sylvia Group of Companies  
Total Land Care  
Tropical Disease Research Center (TDRC)  
University of Wisconsin-Madison  
University of Zambia  
World Food Programme (WFP)  
World Vision  
Yoyo Foods  
Zambia Commodity Exchange (ZAMACE)  
Zambia Seed Traders Association (ZASTA)  
ZamSeed

## **ZIMBABWE**

Agricultural and Rural Development  
Authority (ARDA) Seeds  
African Granaries  
Cairns Foods Limited  
Champion Farmer Seeds  
Chinhoyi University of Science and Technology  
Department for International  
Development (DFID)  
Food and Agriculture Organization (FAO)  
IQ Farmer Seeds  
Livelihood and Food Security Program (LFSP)  
Ministry of Lands, Agriculture, Water,  
Climate and Rural Settlements  
Ministry of Health and Child Care  
Ministry of Primary and Secondary Education  
Mukushi Seeds  
National Tested Seeds  
Pan-Africa Bean Research Alliance (PABRA)  
Palladium  
Prime Seed Co  
Sky Brands  
Smallholder Irrigation and Revitalization  
Program (SIRP)  
Toseck  
Zimbabwe Super Seeds



## BIOFORTIFIED CROPS

### IRON BEAN

*For Nutrition:* Provides up to 80% of daily iron needs

*For Farmers:* High yielding, virus resistant, heat and drought tolerant

*CGIAR Partner:* The Alliance of Bioversity International and CIAT

### IRON PEARL MILLET

*For Nutrition:* Provides up to 80% of daily iron needs

*For Farmers:* High yielding, mildew resistant, drought tolerant

*CGIAR Partner:* ICRISAT

### VITAMIN A ORANGE SWEET POTATO

*For Nutrition:* Provides up to 100% of daily vitamin A needs

*For Farmers:* High yielding, virus resistant, drought tolerant

*CGIAR Partner:* CIP

### VITAMIN A CASSAVA

*For Nutrition:* Provides up to 100% of daily vitamin A needs

*For Farmers:* High yielding, virus resistant

*CGIAR Partner:* IITA and Bioversity/CIAT

### VITAMIN A MAIZE

*For Nutrition:* Provides up to 50% of daily vitamin A needs

*For Farmers:* High yielding, disease and virus resistant, drought tolerant

*CGIAR Partner:* CIMMYT and IITA

### ZINC WHEAT

*For Nutrition:* Provides up to 50% of daily zinc needs

*For Farmers:* High yielding, disease resistant

*CGIAR Partner:* CIMMYT

### ZINC RICE

*For Nutrition:* Provides up to 40% of daily zinc needs

*For Farmers:* High yielding, disease and pest resistant

*CGIAR Partner:* IRRI and Bioversity/CIAT

### ZINC MAIZE

*For Nutrition:* Provides up to 70% of daily zinc needs

*For Farmers:* High yielding, virus resistant

*CGIAR Partner:* CIMMYT and IITA

## HARVESTPLUS.ORG

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Email: [HarvestPlus@cgiar.org](mailto:HarvestPlus@cgiar.org)

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