Accelerating Nutrition
For a Food Systems Transformation
2022 Annual Report
Dear Friends,

As three billion people globally contend with being unable to afford a healthy diet alongside the threatening impacts of climate change, conflict, and poverty, we have an imperative to make diets more nutritious. We must urgently deliver solutions that respond to food systems shocks and build up individual, community, and societal resilience—enabling livelihoods to prosper.

Our work over the last two decades has proven that biofortification is a highly scalable solution that enriches the diets and lives of the most vulnerable people. Amid the crises of recent years, as supply chains and other nutrition interventions were hindered, biofortified crops reached more rural communities than ever before. Our impact was especially marked in Africa and South Asia, where improved access to nutritious food is needed the most.

More than 86 million people in farming families living in low- and middle-income countries accessed biofortified foods this year, a growth of 200% over the last five years achieved through collaborations between partners in the public, private, and civil society sectors. Billions more people could, and should, benefit from this important technology to help safeguard a food-secure future for all.

In 2022 alone, nearly 32 million value chain actors and farming households also received the capacity strengthening support needed to improve their wellbeing and thrive. Over 12 million women gained the skills, confidence, and know-how to grow, process, and sell nutritious crops and foods, acting as change-leaders and agri-preneurs in their communities.

National leaders and governments strongly endorsed biofortification in 2022, and the outcome has been a progressive and sustainable integration of nutrient-enriched crops into local and national government policies and institutional programs.

Looking ahead, as part of the One CGIAR transformation, HarvestPlus will accelerate towards our goal of reducing global hidden hunger and taking nutritious crops to one billion people by integrating our efforts with CGIAR, IFPRI, and HarvestPlus Solutions, the non-profit catalytic scaling arm of our organization. As part of IFPRI, we will strengthen our world-renowned evidence generation for policy and advocacy. With our crop development partners across CGIAR and national agriculture research systems we will help develop better and more nutritious crops varieties and technologies. These innovations will be delivered to farmers through private and public partnerships with HarvestPlus Solutions.

By synergizing our efforts with CGIAR, IFPRI, HarvestPlus Solutions, and our hundreds of steadfast partners we will leverage our collective strengths to enrich food systems, making them more sustainable, resilient, and nutritious.

I extend my sincere gratitude and appreciation to all the members of the HarvestPlus Program Advisory Committee, whose work will be complete upon our integration with CGIAR and IFPRI. Your guidance and oversight over 20 years has led us on a remarkable pathway towards benefiting 100 million people on farms with biofortification in 2023, and millions more through markets and commercial activities.

We sincerely thank our funders for supporting our mission and call upon others to join us in our essential work that’s needed now more than ever.

Sincerely,

Arun Baral

HarvestPlus Leadership

Arun Baral
Chief Executive Officer

Lynn Brown
Director Policy, Strategy, and the Africa Region

Erick Boy
Chief Nutritionist

Wolfgang Pfeiffer
Senior Advisor

HarvestPlus improves nutrition and public health by developing and promoting biofortified food crops that are rich in vitamins and minerals, and providing global leadership on biofortification evidence and technology.

HarvestPlus works across CGIAR and is part of the International Food Policy Research Institute (IFPRI).
Key Metrics in 2022:

17.3M
Smallholder farming households growing biofortified crops, 22 percent more than 2021 and 200 percent more than 2018.

86.5M
People benefiting from biofortification in farming households through HarvestPlus facilitated efforts.

750+
Partners worldwide committed to scaling up biofortification, mostly small and medium-sized enterprises.

31.6M
Farmers and value chain actors received training and technical support to strengthen their ability to grow and sell biofortified crops.

12M
Of these were women who were empowered with knowledge and skills.

100,000+
Metric tons (MT) of commercial biofortified seed produced and distributed, up from 65,000 MT in 2021.
293 varieties of biofortified staple crops available for farmers to grow

11 new biofortified varieties were approved by governments for farmers to grow them in five countries in 2022.

3 new varieties of zinc rice
6 new varieties of vitamin A cassava
2 new varieties of vitamin A maize
As the world began to recover from the COVID-19 pandemic and grappled with crises related to climate, conflict, inflation, and more, national governments and partners responded with significant commitments to scale up biofortification to build nutritious, resilient food systems in low- and middle-income countries.

Collective efforts by HarvestPlus partners, collaborators, and advocates backed by 20 years of rigorous evidence catalyzed the scale up of biofortified nutrient-enriched crops and foods to more people than ever in 2022. Over 86 million people in farming households are now growing and eating biofortified crops, 22 percent more than in 2021—on a trajectory to enrich 100 million lives with biofortification in 2023.

**Regional and Global Endorsements**
- The *2022 State of Food Security and Nutrition in the World Report* endorsed biofortification as a cost-effective measure to prevent micronutrient deficiencies by supplying essential micronutrients to large segments of populations and improving food systems without the need to change eating patterns.

- A *declaration by the African Union* (AU) to scale up food fortification and biofortification in Africa put healthy diets at the forefront of regional policy. Accelerating regional efforts supported by the MacArthur Foundation, the AU resolved to make nutrient-rich seeds and foods sustainably accessible in local markets, publicly procure them from farmers, and incorporate them alongside training in farmer input support programs for long-term impact.

**People Benefiting from Biofortified Crops in Farm Households**

*Through HarvestPlus facilitated efforts. Does not include people who purchase biofortified foods from markets.*
Global Progress Scaling Biofortified Crops

Bangladesh: An unprecedented 4,015 MT of zinc rice was produced and marketed by the Bangladesh Agriculture Development Corporation in 2022—over double 2021's production—bringing total country production to 6,350 MT. This volume of seed will generate more than one million MT of rice that can provide up to 40% of daily zinc needs when eaten daily.

DR Congo: The government is incorporating vitamin A maize, vitamin A cassava, iron beans, and vitamin A orange sweet potato into a large World Bank-funded multisectoral project in three provinces as part of a nutrition-smart agriculture strategy that is also mainstreaming training on agronomy and nutrition for health workers.

India: Iron pearl millet ‘nutricereal’ production rose to 100,000+ MT in 2022, setting the stage for further scale up in 2023, the International Year of Millets. In Bihar state, a Bill & Melinda Gates Foundation-funded project stimulated 4,000+ MT of zinc wheat seed production, enough for a million people to eat zinc wheat for a year. Women Farmers Producer Companies widely promoted zinc wheat with JEEViKA, a Government of Bihar initiative for rural poverty alleviation.

Indonesia: The Ministry of National Development Planning, BAPPENAS, produced 90,000 hectares of zinc rice, up from 10,000 hectares in 2020—engaging nearly half a million farmers. BAPPENAS is committed to biofortification as a critical action for human capital development and to reduce stunting.

Kenya: Iron beans now represent 6.5 percent of the share of beans produced nationally, up from <1 percent in 2019 and rising. Partnership with the Pan-Africa Bean Research Alliance (PABRA) and commitments from five commercial seed producers are boosting seed availability across the country.

Malawi: The Government has accepted recommendations to include biofortification strategies in their National Agricultural Policy, which will increase awareness and uptake of biofortified seeds and foods and result in likely inclusion in the country’s Affordable Inputs Program and Strategic Grain Reserve.
Nigeria: Biofortification is a crucial strategy being actively implemented across three national multi-sectoral policies. With budgetary allocation and collaboration with Agricultural Development Projects, Ministries of Agriculture and Health, and other stakeholders, the policies emphasize biofortification’s role in elevating the micronutrient status of Nigerian women and children.

Pakistan: Government support and partnership engagement led the journey of scaling zinc wheat in Pakistan, where consumption rose significantly from zero in 2014 to over 10 million people in 2022. Production of the mega-popular and high-yielding variety ‘Akbar 2019’ has grown exponentially in formal and informal seed sectors and is on track to claim a majority of the commercial seed market.

Tanzania: A 10-fold increase in iron bean seed production since 2018 by the Tanzania Agricultural Research Institute is paving the way for iron beans to become a significant part of the country’s total bean production through the Commercialization of Biofortified Crops (CBC) Programme, co-led with the Global Alliance for Improved Nutrition (GAIN).

Uganda: As part of a humanitarian effort, over 500 MT of drought-tolerant iron bean seed—a variety that matures faster than other local bean varieties—was disseminated to areas that experienced food shortages due to prolonged drought through several programs including the World Food Programme in partnership with Sasakawa Africa Association and other local NGOs.

Zambia: Rural farmers not serviced by seed companies were reached with vitamin A maize and iron beans thanks to the government’s inclusion of 722 MT of biofortified seed in its social protection Food Security Pack—the largest inclusion of biofortification in the program to date. Seed distribution was paired with capacity strengthening in agronomy, postharvest management, nutrition, processing, and market linkages.

Zimbabwe: Biofortification was highlighted as a major intervention to combat micronutrient malnutrition by the Ministry of Health and Childcare in their 2022 – 2026 food fortification strategy, and by the Ministry of Agriculture in its Smallholder Irrigation Revitalization Program.

HarvestPlus and the World Food Programme released a joint brief that showcases country-level initiatives to scale up biofortified seeds, crops, and foods, and identifies opportunities to integrate biofortified crops and foods in global policies and programs.
Bringing Nutrient-Enriched Foods to Markets

A staggering 40 percent of the world’s population cannot afford a healthy diet. Staple crops—like wheat, rice, beans, cassava, maize, and millet—account for most calories eaten every day, especially during times of crises like those experienced in 2022. Alongside global efforts to affordably diversify diets, enriching traditional staple foods with nutrients is a proven, cost-effective, and sustainable way to add more micronutrients into diets so populations can thrive.

HarvestPlus and its partners are stimulating local and national markets to include biofortified crops and boosting opportunities for smallholders to become commercial vendors. These efforts help extend access to naturally nutritious staples foods to consumers beyond the farm gate.

HarvestPlus facilitates a range of market and commercial activities like those listed below that support public procurement supply chains and activate nutritious seed, grain, and food businesses that can transform food systems.

Driving seed demand: An agreement with Malawi partner Kvuno Hub will increase the production of vitamin A maize seed through a social enterprise seed production hub that guarantees participating farmers a fair price contract.

Stimulating grain procurement: Most zinc wheat grain produced by farmers in Pakistan is being procured by smallscale chakki (wheat) mill owners. This helps amplify rural production and promotes local consumption in highly vulnerable areas. Mill owners received technical information and branded food bags with nutrition information to kick start their sales to consumers.

Establishing food businesses: Nigerian women launched small- and medium-sized enterprises that produce and sell commercial foods made of vitamin A cassava and vitamin A maize through an initiative with the Nasarawa State Government, empowering women to extend the reach of nutritious foods across their communities.

Scaling across markets: Arti Roller Flour Industries Pvt Ltd, a large-scale Indian milling company, launched the first branded, pre-packaged zinc enriched wheat flour that meets the global standard for zinc-enriched grains. This venture responds to consumer demand for naturally nutritious foods, incentivizes farmers to grow more zinc wheat, and will put a nutritious product on plates of families across India when it scales nationwide.

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Supporting Businesses With Tools for Commercialization

HarvestPlus is building an enabling environment through policies, standards, and regulations to increase consumer access to more nutrient-enriched, minimally processed foods.

**Tools** are shared with businesses to help them take nutritious seeds, grains, and products to market.

**Publicly Available Specifications:** Global standards for vitamin A, zinc, and iron grains were completed in 2022, setting out requirements for nutritional value, sampling, packaging, and labeling of biofortified products.

**Labelling guidelines and food brochures:** Guidance informs food manufacturers how to label and market biofortified foods with compelling and legally compliant messages. New logos now help guide consumers to buy nutrient-enriched products and make healthier choices in the marketplace.

Visit our [biofortification toolbox](#) to find more tools for commercialization, tips for food business marketing, an index to prioritize investments in biofortification, concise summaries of research findings, and more.
Cultivating Smallholder Farmers’ Livelihoods

Nutrition-smart technologies help build inclusive food systems that equitably deliver nutrition and withstand shocks. HarvestPlus is taking steps to address barriers women face to improve their nutrition and livelihoods—such as lack of access or ownership of assets, information, credit or cash—and prioritize women as community and business leaders.

Empowering women agripreneurs: Indian women agripreneurs shared technical nutrition and agricultural knowledge with smallholder farmers to empower them to grow and sell zinc wheat in the state of Uttar Pradesh, under the CBC project. Farmers benefitted from a 56 percent increase in financial returns over 2021 through this support.

Advancing access to finance: Women farmers and women’s savings groups in Malawi opened their first bank accounts to purchase nutrient-enriched seed, advancing the financial inclusion of women while training them on financial literacy and the nutritional benefits of biofortification.

Protecting farming-dependent livelihoods: A COVID-19 response project funded by the Government of Canada enabled rural farmers in Bangladesh, DRC, Malawi, Pakistan, Zambia, and Zimbabwe to grow nutrient-enriched food amid crisis and generate USD 146 million of essential income. Over 40 percent of the participating women farmers increased their annual income, improving their life circumstances and ability to action their life choices.

Linking to technology and markets: Five thousand smallholder farmers growing iron beans, vitamin A maize, and vitamin A orange sweet potato are being connected to lucrative markets in Zimbabwe by harnessing the power of digital technologies to enhance their productivity.
Coping with Climate Change

As extreme weather events increase due to climate change, smallholder farming communities are becoming more vulnerable to compromised crop yields and depletions in the nutrient content of plants.

Biofortified crop breeding prioritizes traits that help offset climate-induced declines in agricultural productivity and nutrition, including greater tolerance to heat, drought, and pests, and competitive yield production under local climate conditions. Many varieties also mature faster, making more efficient use of often scarce inputs like water and fertilizer, and allow for additional crops in crop rotations—building added resilience into the food system.

Climate-Smart Biofortified Crops Provide Relief and Protection

Offsetting losses: In the face of extreme flooding in 2022, Pakistani farmers benefited from growing highly resilient and drought-tolerant zinc wheat. Production rose to 5.5 MT, up from one MT in 2020. Opting for zinc wheat can offset climate-related losses in yield of other conventional varieties, helping meet the population’s need for this staple.

Boosting productivity: Climate volatility is stifling crop yields and driving up food prices in northern Nigeria. A two-year initiative funded with UK aid from the UK government will enhance climate resilience among agri-enterprises and smallholder farmers and provide access and training on nutrient-enriched crop production technologies and practices.
Responding to Shocks
Meeting the Nutrition Needs of the Most Vulnerable

HarvestPlus and our partners worked tirelessly to respond to the global increased food and nutrition needs brought about by the devastating effects of COVID-19, climate change, rising cost of living, and conflict.

**Innovating for improved affordability:** Strategies were developed to make seed and grain more affordable to resource-poor farmers. For example, in Pakistan, bags of zinc wheat seed were split among families to make them more financially accessible than the relatively more expensive 50kg bags available in markets. In Malawi, more vitamin A maize seed was sold in 1 kg packs, instead of traditional 5 kg packs, and in Bangladesh and Pakistan, zinc rice and zinc wheat grain was heavily subsidized for economically disadvantaged households.

**Pro-poor programming:** Sixty-two thousand rice farmers and 1,750 wheat and lentil farmers were provided with nutrient-enriched seeds through the multi-partner Bangladesh Initiative to Enhance Nutrition Security and Governance project, supported by the European Union. Biofortification is being integrated into multi-sector pro-poor governance models and nutrition interventions across nutritionally vulnerable areas in the country.

**Empowering refugees:** Over 17,000 refugees and their host communities in Zambia were supported through a collaboration with the UN Refugee Agency (UNHCR) that supplied vitamin A orange sweet potato vines and the means to grow them. The success of this approach is leading to further scaling and inclusion of biofortification in UNHCR work.
Enriching School Meals
Strengthening Home Grown School Feeding Programs

Nutritious school meals are an investment in human capital development. They address childhood malnutrition, improve students’ academic performance, boost attendance—especially among girls—and provide a safety net that keeps communities fed amid shocks.

HarvestPlus is working to sustainably embed locally cultivated nutrient-enriched foods into school feeding programs like those below, primarily using a “home-grown” approach that guarantees long-term demand for farmers’ produce, supports local economies, and ensures a bright future for all children.

Establishing Nutri-Schools: A ‘Nutri Pathshala’ initiative will ensure two million Indian school children have equal access to more nutrients and nutrition education. The Happel Foundation funded project is enriching the menu of the world’s largest school feeding program, the Mid-Day Meal Scheme, with biofortified foods.

Home Grown School Feeding: An additional 1.2 million children in Kenya, Tanzania, and Malawi will be eating locally-produced vitamin A maize and iron beans in their school meals through a project partnership with AGRA and PABRA, with support from the Rockefeller Foundation. In Nigeria, Oyo State adopted vitamin A maize in its National Home Grown School Feeding Programme for primary school pupils.

Providing universal nourishment: The Government of Malawi’s Ministry of Education set a goal to establish a national nutritious school feeding program by 2030, providing a pathway to scale up efforts underway with the Rockefeller Foundation and Waterloo Foundation to bring healthy school meals to children using nutrient-enriched foods produced by local farms and school gardens.

New Evidence
Eating zinc rice daily improved the growth of preschool children in Bangladesh, an outcome that carries lifelong physical and cognitive benefits. Am J Clin Nutr 115(3), 2022

Measurable benefits to brain health, as well as body, were experienced by adolescent school children who ate iron pearl millet frequently, aiding their learning and future productive participation in society. BMC Public Health 22 (1299), 2022

Nutritious school meals are the key for Africa’s children

The African Union designated 2022 the Year of Nutrition, opening the door to advance the nutritional quality of Africa’s school feeding programs by incorporating nutrient-enriched staple foods.
2022 Financials

Receipts and Disbursements
(in million USD)

Receipts
Revenue $17.603 M
Interest Income $0.075 M
Total Revenue $17.678 M

Total Disbursements $17.678 M

2022 Donors to HarvestPlus

HarvestPlus thanks our funding partners for supporting our mission to rapidly scale biofortification and help to sustainably address hidden hunger.

AGRA
The Bill & Melinda Gates Foundation
Children’s Investment Fund Foundation
Food and Agriculture Organization of the United Nations
UK Foreign, Commonwealth & Development Office
The Government of Canada
The Government of the Democratic Republic of the Congo
Happel Foundation
The John D. and Catherine T. MacArthur Foundation
The Netherlands Ministry of Foreign Affairs and the German Federal Ministry for Economic Cooperation and Development, through a partnership with the Global Alliance for Improved Nutrition
The Rockefeller Foundation
CGIAR
United States Agency for International Development/US Feed the Future Initiative
The Waterloo Foundation
World Vision UK
Governance

HarvestPlus Program Advisory Committee (PAC)

The Board of Trustees of IFPRI have delegated responsibility for oversight of HarvestPlus to the PAC.*

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

PAC Members
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High Representative of the Sahel Coalition

Esi Foriwa Amoaful
Director of Nutrition, Ghana Health Service

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

David Governey
Corporate Governance and Risk Management Consultant

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Andrew M. Prentice
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Joe Tohme
Director, Improving Crops, The Alliance of Bioversity and CIAT Programs

Paulus Verschuren
Chair, Access to Nutrition Foundation

Hilary Wild
CGIAR System Board Member

Designated Representative to the PAC
Lawrence Kent
Senior Program Officer, Agricultural Development, The Bill & Melinda Gates Foundation

*PAC membership as of the October 2022 PAC general meeting

Awarding Excellence

Mahalingam Govindaraj (Govind), HarvestPlus Senior Scientist for Crop Development, was honored by the World Food Prize as the recipient of the 2022 Norman E. Borlaug Award for Field Research and Application. Govind was recognized for his outstanding leadership mainstreaming biofortified crops, particularly pearl millet, in India and Africa. For more than a decade, he has directed the development and dissemination of high-yielding iron pearl millet varieties that have contributed to better nutrition for thousands of farmers and their communities.
2022 HarvestPlus Partners

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

CGIAR CENTERS
 Alliance of Bioversity International and CIAT
 International Center for Agricultural Research in the Dry Areas (ICARDA)
 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 Rice Research Institute (IRRI)

UNIVERSITIES & OTHER RESEARCH ORGANIZATIONS
 Centers for Disease Control (CDC)
 Children’s Hospital Oakland Research Institute-CHORI/UCSF
 Chinese Academy of Agricultural Sciences (CAAS)
 Clemson University
 Cornell University
 CSI Arogyavaram Medical Center (AMC)
 Federal Institute of Technology (ETH-Zurich)
 Flinders University
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 University of Oklahoma
 Wageningen University
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 Euromonitor International
 Food and Agriculture Organization of the UN
 Global Alliance for Improved Nutrition (GAIN)
 Leatherhead Food Research

Precision Agriculture for Development
 US Dry Bean Council
 World Food Programme

IN-COUNTRY PARTNERS
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 Amra Kaj Kori (AKK)
 Bangabandhu Sheikh Mujibur Rahman Agricultural University (BSMRAU)
 Bangladesh Institute of Nuclear Agriculture (BINA)
 Bangladesh Rice Research Institute (BRRI)
 Bangladesh Agricultural Research Institute (BARI)
 Bangladesh Agricultural Development Corporation (BADC)
 Bangladesh Wheat and Maize Research Institute (BWMI)
 Bakerganj Forum
 Department of Agricultural Extension (DAE)
 Eco-Social Development Organization (ESDO)
 Gram Unnayan Karma (GUK)
 Natun Zibon Rochi (NAZIR)
 RDRS Bangladesh
 Shariatpur Development Society (SDS)
 Shawdesh Unnay Kendra (SUK)
 Society Development Committee (SDC)
 Supreme Seed company Ltd.
 Thengamarah Mohila Sabuj Sangha (TMSS)
 The Global Alliance for Improved Nutrition (GAIN)
 Voluntary Rural Development Society (VRDS)
 World Vision Bangladesh

DR Congo
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 Accelerated Education Program (AEP)
 Action Aid for Development Cooperation and Solidarity (AACDS)
 ADAEV
 ADEAR
 ADEXI
 ADMU
 ADPF
 ADVS
 AFP
 African People Empowerment Foundation (APEF)
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 Agnes Sadiki
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 APAMA
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 Asian Institute of Poverty Alleviation (AIPA)
 Association for the Education of Women in Africa (ADEA)
 Association for the Support of the Women of Maniema
 Association of Improved Seed Multipliers (AMSA)
 Association of Products to Market (APROMA)
 Association of Women’s Cooperatives and Synergy (ACOSIF)
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 Aumonerie de L’isp
 AVUAC
 BASHWIRA
 Bertin Mulabala
 Beth Saida
 Biocarbon and Rural Development (BIODEV)
 BIONET
 Birava Health and Development Committee (CSDB)
 Buhanga Agro-Pastoral Cooperative (COOPABU)
 Buhengere Agricultural Project (PABU)
 Bukavu Youth Agripreneurs (BYA)
 CAM International
 Capacity Assessment and Development Program (CADEP)
 CAPSA Luotu
 Catholic University of Bukavu (UCB)
 CFAD
 CFG
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 Chiefdom of Kabare
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<td>Food and Agriculture Organization of the United</td>
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<td>Higher Institute of Pedagogy (ISP)</td>
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<td>Kashura Benant</td>
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<td>Banaras Hindu University (BHU)</td>
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<td>Pearl Millet (AICRP)</td>
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<td>ICAR - Indian Agricultural Research Institute (IARI)</td>
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<td>ICAR - Indian Institute of Wheat and Barely Research (IIWBR)</td>
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World Vision Tanzania
Tanzania Food and Nutrition Centre (TFNC)
Partnership for Nutrition in Tanzania (PANITA)
World Food Program Tanzania
Farm to Market Alliance (FtMA)
Yara Tanzania
Nutrition International Tanzania

Uganda
Nutreal
Namugongo Millers Ltd.
SESACO
Lishe processors
Bake n Flake
Jonisa Bakers
Divine Organic Foods
Farm Radio International
Capital FM Radio
Central Uganda Sweet Potato and Seed Multiplier Association (CUSSEMA)
Northern Uganda Seed Multipliers Association (NUSEMA)
Eastern Uganda Seed Multipliers Association (EUSEMA)
Western Uganda Seed Multipliers Association (WUSEMA)
Kanyamaizi Seed producers
Kyazanga Farmers’ Cooperative Society
Ministry of Agriculture, Animal Industry and Fisheries
Ministry of Health
Office of the Prime Minister
Namulonge Vegetable Seeds producers
NASECO Seeds
National Agricultural Research Organization (NARO)
National Crops Resources Research Institute (NaCRRI)
Peace Corps
Pearl Seeds
SASAKAWA Africa Association
Self Help Africa
World Vision Uganda

Zambia
260 Brands (Seba Foods)
Advanta Seed
AfriSeed
AgResults
Arume Quiver
Bean Networks
Butemwe Milling
Care International
Caritas
Chalasha Multi-Purpose Cooperatives
Centre for International Forestry Research (CIFOR)
Chimusoro Milling
Choma Milling
Civil Society Organisation on Scaling Up Nutrition (CSO-SUN)
Concern Worldwide
Centre for International Forestry Research (CIFOR)
Community Technology Development Trust (CTDT)
Development Aid from People to People (DAPP)
Fanyate Milling
Future Seeds
FVC Milling
Good Nature Agro
Indaba Agricultural Policy Research Institute (IAPRI) Kamano Seed
International Fund for Agriculture Development (IFAD)
International Institute of Tropical Agriculture (IITA)
International Maize and Wheat Improvement Center (CIMMYT)
International Potato Centre (CIP)
Iowa State University
Jacaf Youth Enterprises
Johns Hopkins Bloomberg School of Public Health
Kamano Seed Co.
Lwazim Limited
Libala Market Store
Michigan State University, Micronutrient Malnutrition Taskforce
Ministry of Agriculture
Ministry of Community Development and Social Services
Ministry of Education
Ministry of Health
Ministry SME
Misamfu SGA
MKP Farms
Mumurite
Musanza Milling
Musuka
Mushe Milling
Nushili Beans
National Food and Nutrition Commission (NFNC)
National Institute for Scientific and Industrial Research (NISIR)
Natural Resource Development College (NRDC)
Novatek
NutriAID
Peace Corps
Purdue University, SEED Solutions
Programme Against Malnutrition (PAM)
ProfitPlus
Scaling Up Nutrition (SUN) Business Network
Seba Foods
SeedCo
Self-Help Africa (SHA)
SHAI5 Foods
Share Africa
Star Milling
Sylva Group of Companies
Tilland Milling
Total Land Care
Tropical Disease Research Center (TDRC)
Tundwe Milling
Twala Farms
United Nations Food and Agriculture Organisation (FAO)
United Nations High Commission for Refugees (UNHCR)
University of Wisconsin-Madison
University of Zambia
University of California
Van Burdet
WorldFish (WF)
World Food Programme (WFP)
World Vision/Vision Fund
Yoyo Foods
Zambia Agriculture Research Institute (ZARI)
Zambian Fertilizer/FTG,
Zambia Commodity Exchange (ZAMACE)
Zambia Seed Traders Association (ZASTA)
ZamSeed
Zambezi Seed

Zimbabwe
Abide Nursery
Africa Preserve
African Granary
Agricultural Rural Development Authority (ARDA) Seeds
Bucabella Nursery
Cairns Foods
Champion Seeds
Chiko Foods
Chinhoyi University of Technology
Community Capacity Building Initiative Centre for Africa (CCBICA)
Community Technology Development Trust (CTDT)
Erikah
Family Table Food
Food & Nutrition Council (FNC)
Food and Agriculture Organization (FAO)
Grow Crop Zimbabwe
Higherlife Foundation
Horticulture Research Institute
Indaba Agricultural Policy Research Institute (IAPRI)
International Maize and Wheat Improvement Center (CIMMYT)
IQ Farmer
Lead Trust
Ministry of Health & Child Care
Ministry of Lands, Agriculture, Fisheries, Water, Climate, and Rural Development
Mukushi Seeds
National Foods Holding Limited
National Tested Seeds
Pan-Africa Bean Research Alliance (PABRA)
Prime SeedCo
SkyBrands
Smallholder Irrigation Revitalization Program (SIRP)
SNV
Super Foods
Tosek
UNICEF
University of Zimbabwe
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