

Since 2006, HarvestPlus has been working in Uganda to help alleviate vitamin A deficiency and anemia in vulnerable populations, especially women and children, by promoting the production, consumption and marketing of vitamin A orange sweet potatoes and iron beans. We have worked closely with government, private sector, academia, NGOs and the media to make this happen. Currently, we are implementing the USAID MENU Project (2016-2021) which aims to reach 420,000 farming households with nutritious staples.



The cost of micronutrient deficiency in Uganda

- Annually, Uganda loses \$145 million to vitamin and mineral deficiencies (World Bank).
- About 9 percent of children in Uganda are vitamin A-deficient, and one of every two children are anemic.
- Vitamin A deficiency impairs growth, causes eye damage leading to blindness, and increases the risk of infections such as diarrheal disease.
- Iron deficiency impairs mental development and learning capacity, increases weakness and fatigue, and may increase the risk of women dying in childbirth.
- 53% of children and 32% of women suffer from some degree of anaemia.

Biofortified Crops in Uganda

VITAMIN A ORANGE SWEET POTATO

- *Nutritional benefits:* Provides up to 100% of daily vitamin A needs.
- *Farmer benefits:* High yielding, disease tolerant and drought tolerant.

IRON BEAN

- *Nutritional benefits:* Provides up to 80% of daily iron needs.
- *Farmer benefits:* High yielding, disease tolerant, heat and drought tolerant.

“I see these orange sweet potatoes as medicine because for me they helped improve my eyesight.”

— Mary, a community lead mother in Lira District, Northern Uganda.



Building Strong Seed and Crop Value Chains

In addition to reaching and empowering farmers, HarvestPlus provides technical, logistical, training, and marketing support to a wide array of partners in seed and food value chains to build strong biofortified food systems.



Crop Development: HarvestPlus supports the National Agricultural Research Organization (NARO) to breed, test and release biofortified varieties.



Seed Multiplication: HarvestPlus supports private labs to micro-propagate virus-free orange sweet potato vines and co-invests with the secondary vine multipliers to further multiply the vines. It also supports multiplication of certified iron bean seed by supporting access to foundation seed and building capacity of seed producers.



Seed and Grain Distribution/Dissemination: HarvestPlus supports NGOs to promote biofortified crops through their livelihood programs by disseminating seed to their farmers. HarvestPlus also supports private vine multipliers and agro-input dealers to make seed available to local communities.



Consumer Engagement: HarvestPlus creates awareness on biofortified crops through several channels including media outreach, radio messages and talk shows, radio dramas and field days.



Market Development: HarvestPlus also supports private processing companies mainly SMEs, cottage industries to process products from orange sweet potatoes and iron beans, thus giving an opportunity to non-farming communities to benefit from the nutritional value of the biofortified crops.



Policy Engagement: HarvestPlus engages government at national and district/sub national levels to advocate for biofortified crops. As a result several relevant policy documents have included the promotion of biofortified crops as one of the strategies to address malnutrition in the country including Nutrition policy, Nutrition Action Plans, Agriculture Sector Strategic Plan, and National Development Plan.

HarvestPlus: 16 Years in Uganda

2006-2009

Reaching End Users

Funder: **Bill & Melinda Gates Foundation**

Crops: **Vitamin A Orange Sweet Potato (OSP)**

Total Households Growing These Crops: *(end 2009)*
13448 in 3 Districts

2010-2011

HarvestPlus Challenge

Funder: **HarvestPlus and World Food Programme**

Crops: **Iron Bean, Vitamin A OSP**

Total Households Growing These Crops: *(end 2011)*
16006 in 2 Districts

2011-2016

Developing and Delivering Biofortified Crops (DDBC)

Funder: **USAID through the U.S. Feed the Future Initiative**

Crops: **Iron Bean and Vitamin A OSP**

Total Households Growing These Crops *(end 2016)* **483,000 Growing OSP, 180,000 growing iron beans in 25 Districts**

2017-present

Meals for Nutrition (MENU)

Funder: **USAID through the U.S. Feed the Future Initiative**

Crops: **Iron Bean and Vitamin A OSP**

Total Households Growing These Crops *(end 2019)* **960,000 growing OSP, 695,000 growing iron beans in 40 Districts**

PARTNERS – Breeding: NARO, CIP, Makerere University • **Crop processing/value addition partners:** Namugongo Millers, Maama Care Foundation, Divine Organic Foods Ltd, SESACO • **Promotion of biofortified crops:** Caritas-Hoima Diocese, Caritas Luwero Diocese, A2N, WV, Reach Out Nkokonjeru, VEDCO, HCU, CRS, Mercy Corps, Self Help Africa, SASAKAWA Global 2000, CIP • **Seed multiplication:** Pearl Seeds, CEDO Seeds, EQUATOR Seeds, Bio-Crops, Senai Biosciences, Kigarama Cooperative and Marketing Society, Makerere University • **OSP vine multiplication:** Vine multipliers • **Advocacy partners:** Ministry of Agriculture, Animal Industry and Fisheries, Ministry of Science Technology and Innovation, Ministry of Health, Office of the Prime Minister

Partner with us to make food systems more nutritious, inclusive, and sustainable – CONTACT: Sylvia Magezi, Country Manager-HarvestPlus Uganda, Plot 15, East Naguru-Kampala(U) Email: S.Magezi@cgiar.org, Tel: +256 (0)772 483304

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 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).

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