



HarvestPlus improves nutrition and public health in the Democratic Republic of Congo (DRC) by promoting **cassava** that provides more **vitamin A** and **beans** that provide more **iron** in the diet. We work with more than 200 partners drawn from government, business, and civil society.

Better Crops for Better Nutrition

We use a process called biofortification to conventionally breed staple food crops that are richer in essential vitamins and minerals and can be grown by rural communities that are often missed by other interventions, such as supplementation and food fortification. Our food-based approach relies on familiar staple foods that people already eat regularly and that can be part of other efforts to improve nutrition, such as dietary diversification.

The Costs of Vitamin & Iron Deficiencies

- Vitamin A deficiency lowers immunity, impairs vision, and may lead to blindness and even death.
- 61% of Congolese children under 5 are estimated to be vitamin A deficient (*WHO*).
- Iron deficiency impairs mental development and learning capacity, increases weakness and fatigue, and may increase the risk of women dying during childbirth.
- 60% of Congolese children under 5 are estimated to be iron deficient (*DHS*).
- Annually, the DRC loses \$100 million in GDP to vitamin and mineral deficiencies (*World Bank*).

Crops for Democratic Republic of Congo

Cassava is the most important staple food in the DRC, and beans are among the main staple food crops in the country.

Vitamin A Cassava

DRC ranks number 7 out of 78 countries suitable for investing in vitamin A cassava.

Nutritional Benefits: Provides up to 40% of daily vitamin A needs

Farmer Benefits: High yielding, virus resistant

Biofortified Varieties: Kindisa (TMS 2001/1661)



Iron Bean

DRC ranks number 30 out of 81 countries suitable for investing in iron beans.

Nutritional Benefits: Provides up to 50% of daily iron needs

Farmer Benefits: High yielding, virus resistant, heat and drought tolerant

Biofortified Varieties: COD MLB 001 (bush), COD MLB 032 (bush), HM 21-7 (bush), RWR 2245 (bush), PVA 1438 (bush), COD MLV 059 (climber), VCB 81013 (climber), Nain de Kyondo (climber), Cuarentino (climber), Namulenga (climber)

On the Ground

HarvestPlus and its partners work in the DRC to promote the availability, adoption, and consumption of vitamin A cassava and iron beans. The goal is that more than 1.2 million Congolese farming households will be growing these biofortified crops by 2018.



How We Work

HarvestPlus supports the National Institute of Agricultural Studies and Research (INERA) and the National Seed Service (SENASA) to breed, test, and release varieties of vitamin A cassava developed through our partnership with the International Institute of Tropical Agriculture (IITA) and iron beans developed through the International Center for Tropical Agriculture (CIAT). We work with private farmers, cooperatives, and non-governmental partners to produce and multiply stems and seed of released varieties for delivery to farmers. A payback system ensures that poor farmers receive free stems or seed, which they repay in kind upon harvest. Our partnership with public and non-governmental organizations trains farming households in crop management, nutrition, post-harvest handling, and marketing. We are facilitating private sector engagement in the value chain for vitamin A cassava and iron beans, which is essential for long-term sustainability of stem and seed distribution, and to strengthen markets for biofortified crops. Through public awareness campaigns, we leverage the power of mass media and local icons, including music stars, to educate Congolese on micronutrient deficiencies and the benefits of biofortified cassava and beans. Our advocacy seeks to strengthen national ownership of biofortification through effective integration into national nutrition and agricultural policies.

“We are cultivating high-iron beans because they are high yielding, early maturing, good tasting, and more nutritious for children and women, in addition to helping us generate more income.”

~ Eugenie Bulambo

Woman farmer and leader of HarvestPlus local partner Grenier de Kabare

Partners

CGIAR: International Center for Tropical Agriculture (CIAT) • International Institute of Tropical Agriculture (IITA) • **Local:** Actions Concertées pour le Développement Durable (ACODED) • Adventist Development and Relief Agency (ADRA) • Amis des Semences (AS) • Association Coopérative pour la Synergie Féminine (ACOSYF) • Association de Vendeurs de Vivres et de Semences (ADVS) • Association des Agronomes Professionnels (AGROPRO) • Association des Cultivateurs et Éleveurs (AJECEDEKI) • Association des Femmes Paysannes de Gimbi (AFPG) • Association des Femmes Techniciennes de Développement Rural (AFTDR) • Association Paysanne de la Cité Kimbala (APAKI) • Association pour le Développement des Fermiers de Dwale (APDFD) • Association pour la Promotion de la Femme de Lukula (APROFEL) • Association pour la Santé et le Développement Familial • Association pour le Développement Endogène de Matadi (ADEM) • Centre Agricole pour le Développement Integral de Idjwi (CAD) • Centre Agricole pour le Développement Intégré (CADI) • Centre de Développement Communautaire (CDC) Kiring • Centre d'Encadrement pour le Développement Communautaire (CEDECOM) • Centre d'Expérimentation des Technologies Appropriées (CEDTA) • Centre de Développement Rural (CEDER) • Centre pour le Développement Rural de Kwilu-Ngongo (CDRK) • Département Femme et Famille Provinciale (DFFP) • Eglise des Saints de Derniers Jours • Etablissements Manoka • Femmes Business • Ferme Caritas • Ferme d'Application des Résultats de la Recherche (FARRE) • Fondation Nsimba Nzungila (FNN) • Groupe d'Action pour le Développement Durable (GADD) • Groupe Agro- Pastoral du Kivu (GAP) • Groupe d'Encadrement des Initiatives d'Auto-promotion Sociale (GEIAPSO) • Groupe d'Initiatives pour l'Agroforesterie en Afrique • Groupe du Peuple de Dieu (GROUPEDI) • Habitant Star Dignity • Initiative Kimpa Vita • Institut National pour l'Etude et la Recherche Agronomiques (INERA) • La Voie Internationale • Laboratoire d'Appui aux Activités Agro-pastorales au Congo (LAPAC) • Layuka S.P.R.L. • Life Line International Ministries • Main dans la Main (MDM) • Maminu/ONGD • Paroisse de Mwanda • Partage-Vie • Plantation Bakulikira • Programme d'Appui pour l'Environnement au Kwango (PAEK) • Programme d'Appui aux Vulnérables (PAV) • Programme National de Nutrition (PRONANUT) • Projet Agricole de Buhengere (PABU) • Radio télévision Nationale Congolaise (RTNC) • Service National de Semences (SENASA) • Sœurs de Marie Reine de la Paix de Kenge • Union de Producteurs Agricoles pour le Développement Intégré (UPROADI) • Université Evangélique en Afrique (UEA) • University of Lubumbashi (UNILU) *(Only key partners listed)*

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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). CGIAR is a global agriculture research partnership for a food secure future. Its science is carried out by its 15 research centers in collaboration with hundreds of partner organizations. The HarvestPlus program is coordinated by two of these centers, the International Center for Tropical Agriculture (CIAT) and the International Food Policy Research Institute (IFPRI).



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