A ‘food basket’ approach for scaling up biofortified crops and enhancing Nutrition Security in Africa

Sub-Saharan Africa is the region with the highest prevalence (percentage of population) of hunger. One person in four in this region is undernourished. The vast majority of people also suffer micronutrient malnutrition (hidden hunger) because they do not consume enough micronutrients required to lead healthy and productive lives. The Building Nutritious Food Baskets (BNFB) Project through a multi-crop (‘food basket’) approach advocates for increased investment in biofortified crops as a sustainable way to combat micronutrient malnutrition, especially among young children under the age of five and women of reproductive age. BNFB also focuses on developing institutional capacity to design and implement gender-sensitive programs and projects to ensure wide access and utilization of biofortified crops in selected African countries.

BNFB is a three-year project (November 2015 – October 2018) implemented in Nigeria and Tanzania. The goal of BNFB is to accelerate and support scaling of biofortified crops as a sustainable way to ensure wide access and utilization of biofortified crops at scale. The key objectives of the project are to:

1. Strengthen the enabling environment for investments in biofortified crops.
2. Develop institutional and Individual capacities to produce and consume biofortified crops.

A multi-partnership and multidisciplinary Approach

BNFB initiative is implemented through a consortium of partners. The International Potato Center (CIP) is the lead partner, working with a range of partners who include four CGIAR centers; governments of Tanzania and Nigeria, and a range of other national and regional partners and programs working on nutritious variety of staple crops. The project endeavors to create synergy with complementary ongoing projects and initiatives in order to add value and fill critical gaps.

The partners include:
- The International Potato Center (CIP) with expertise in orange-fleshed sweetpotato (OFSP)
- The International Center for Tropical Agriculture (CIAT) with expertise in high iron beans
- The International Maize and Wheat Improvement Center (CIMMYT) with expertise in vitamin A (orange) maize; vitamin A (yellow) cassava and vitamin A (orange) sweet potato and high iron beans
- HarvestPlus as the global leader in biofortification with experience in scaling up at the country level
- Forum for Agricultural Research in Africa (FARA) which is responsible for policy engagement and advocacy at regional level

What does BNFB want to achieve?

The BNFB project will work on catalyzing sustainable investment for the utilization of biofortified crops at scale, advocacy for policy change, nutrition education, and behavior change communication for demand creation, capacity development, and institutional learning to support the scaling up of multiple biofortified crops (vitamin A (lycopen) cassava, vitamin A (orange) maize, vitamin A (orange) sweet potato and high iron beans).

a) Advocacy efforts at country and regional levels

Country level

Advocacy efforts will aim to ensure that biofortified crops are prioritized in the revised national Agricultural Investment Plans (AIPs) based on the post Malabo CAADP Roadmap and Strategy. Ultimately this will catalyze policy change and help generate new investments - by governments, developmental partners, and the private sector to scale up adoption and utilization of multiple biofortified crops. This will be achieved through strengthening the enabling environment for investments in biofortified crops in Nigeria and Tanzania.

A team of change agents - advocacy (at national level) and champions (at regional level) will seek to influence leaders in the fields of agriculture, health, nutrition and education as well as NGOs and donor organizations to expand investment in the production, promotion and utilization of the multiple biofortified crops (vitamin A (yellow) cassava, vitamin A (orange) maize, vitamin A (orange) sweet potato and high iron beans). The change agents will advocate for creation of favorable policy environments and investment for bio-based interventions to combat hidden hunger in Nigeria and Tanzania.

Regional level

BNFB will create a pool of champions who will ensure inclusion of biofortified crops as an integral part of strategies endorsed by regional and sub-regional bodies in Sub-Saharan Africa to address nutrition insecurity and micronutrient malnutrition. BNFB will work with regional nutrition champions including: The African Union, the science agenda for Agriculture in Africa (S4A); The Comprehensive Africa Agriculture Development Program (CAADP); and the New Partnership for Africa’s Development (NEPAD); Technologies for African Agricultural Transformation (TaAT) agenda.

b) Develop Institutional and Individual Capacity for Biofortified Crops

BNFB will develop institutional and individual capabilities to produce and consume biofortified crops for increased income for farmers and improved health, particularly for adolescents, women of child-bearing age and young children, in both rural and urban areas. The project will also develop capacity of national implementing agencies to design and implement technically strong, gender-responsive programs and interventions that will drive uptake of biofortified crops. BNFB will also support technical training and step-down modular courses in priority areas identified as key gaps to be addressed along the respective value chains of the four biofortified crops.

c) Seed Systems

BNFB will catalyze impact-oriented seed systems. The project will work on on-going initiatives and add value by addressing prioritized key gaps along the respective seed systems value chains. The project will assess and appraise the demand for seed/plant material of the selected biofortified crops, establish specific champions’ platforms to speed up production and marketing of biofortified crops, work with national seed agencies, the private sector, farmer/vasco youth groups for strategic, large scale production of biofortified crops and facilitate maintenance and continuous supply of breeder seeds.

Key milestones of BNFB?

- At least 310 million investment devoted to biofortified crops programs in Nigeria and Tanzania by public, private and NGO sectors in support of biofortification
- At least 7 country and 3 regional policies/strategic plans developed/formulated and implemented that prioritize support to biofortification to accelerate the scaling of biofortified crops within wider agricultural and nutrition/health sectors
- At least 5 technical programs supporting or utilizing biofortification designed and implemented by 2018
- Biofortification included as a standard approach in national crop development programs of at least 2 crops
- At least 10,000 change agents have the capacity to design and implement gender sensitive projects/programs along the value chains that drive uptake of biofortified crops
- Biofortification mainstreamed in national crop breeding programs and extension services (private and public) and biofortified varieties of staple crops prioritized in the development and release process
- At least 11 varieties of biofortified crops fast tracked for release in the two countries
- At least 4 commercial processors processing biofortified products for large scale consumption

Overall the project impact will be demonstrated by a general increase in policy action in the national arenas of food production and nutrition, increased access and intake of biofortified foods that are rich in micrornutrient (vitamin A and iron) and increased food and nutrition security at the household level.

2.175 million Additional households will adopt biofortified crops in Nigeria and Tanzania as a result of the BNFB investment over the next five years.

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Biofortified crops are prioritized in the revised National Agricultural Investment Plans (NAIPs) based on the post-Malabo CAADP Roadmap and Strategy. Ultimately this will catalyze policy change and help generate new investments - by governments, developmental partners, and the private sector to scale-up adoption and utilization of multiple biofortified crops. This will be achieved through strengthening the enabling environment for investments in biofortified crops in Nigeria and Tanzania.

A team of change agents - advocates (at national level) and champions (at regional level) - will seek to influence leaders in the fields of agriculture, health, nutrition and education as well as NGOs and donor organizations to expand investment in the promotion, production and utilization of the multiple biofortified crops (vitamin A (yellow) cassava, vitamin A (orange) maize, vitamin A (orange) sweetpotato and high iron beans). The change agents will advocate for creation of favorable policy environments and investments for food-based interventions to combat hidden hunger in Nigeria and Tanzania.

Regional level
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Key milestones of BNFB
- At least $10 million investment devoted to biofortified crops programs in Nigeria and Tanzania by public, private and NGO sectors in support of biofortification
- At least 7 country and 3 regional policies/strategic plans developed/formulated and implemented that prioritise support to biofortification to accelerate the scaling of biofortified crops within wider agricultural and nutrition/health sectors
- At least 5 technical programs supporting or tailoring biofortification designed and implemented by 2018
- Biofortification included as a standard approach in national crop development programs of at least 2 crops
- At least 15,000 change agents have the capacity to design and implement gender sensitive programs/projects along the value chains that drive uptake of biofortified crops
- Biofortification mainstreamed in national crop breeding programs and extension services (private and public); and biofortified varieties of staple crops prioritized in the development and release process
- At least 11 varieties of biofortified crops fast tracked for release in the two countries
- At least 4 commercial processors processing biofortified products for large scale consumption

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