



Building Nutritious Food Baskets Project: Nigeria advocacy strategy

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International Potato Center
P.O. Box 1558, Lima 12, Peru
cip@cgiar.org • www.cipotato.org
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Production Coordinator

Joyce Maru

Copyediting and Layout

Kellen Kebaara

Cover Design

Communications and Knowledge Resources Center

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Acronyms

ADPs agricultural development programs

ARMTI Agricultural and Rural Management Training Institute

CBOs community-based organizations
CIP International Potato Center
GMOs genetically modified organisms

IITA International Institute of Tropical Agriculture

LGAs local government areas

MDAs ministries, departments and agencies
MDGs Millennium Development Goals
NGOs nongovernmental organizations

NRCRI National Root Crops Research Institute

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1. Introduction

1.1 Background and rationale

There is a gamut of evidence suggesting that malnutrition, including micronutrient deficiencies, is prevalent in Nigeria. Although the government has instituted several measures to address the deficiency challenges, several segments of its population continue to manifest the symptoms of micronutrient deficiencies. Statistics indicate that about 63% of women are anemic and 31% are iodine deficient, and close to 30% of under-fives are vitamin A deficient. Although Nigeria recorded a decline in under-5 stunting from 41% in 2008 to 37% in 2013, the country accounted for 11 million out of the world's 60 million stunted children in 2012. The Nigeria Demographic and Health Survey showed that the trend in nutritional status worsened from 24% in 2003 to 29% in 2013 for underweight, and from 14% in 2008 to 18% in 2013 for wasting.

Current efforts to address the prevailing micronutrient malnutrition in Nigeria include supplementation programs that provide iron and vitamin A capsules to women of reproductive age and children under the age of five through the health sector. However, evidence shows that even where supplementation coverage is high it only targets the most vulnerable groups, yet the entire population needs to have access to adequate micronutrients. Food fortification as an approach to address micronutrient malnutrition has so far been largely limited to branded commercial food, specifically fortifying salt with iodine; cooking oil, sugar and margarine with vitamin A; and wheat flour and maize meal with vitamin A, iron and B vitamins. The compliance and coverage rates of this are low. Little or no emphasis has been placed on the food-based approaches of dietary diversification and biofortification. Biofortification, the enhancement of micronutrient levels in staple crops through biological processes such as conventional plant breeding and genetic engineering,⁵ provides an additional strategy for addressing micronutrient malnutrition in Nigeria. Biofortification has multiple advantages, including the fact that it capitalizes on the regular daily intake of a consistent amount of staple food by households and that it has the potential to reach remote rural areas not easily reached by the other initiatives. These advantages are the rationale behind the Building Nutritious Food Baskets (BNFB) project in Nigeria.

1.2 The BNFB intervention

The BNFB project covers the three years of 2015 to 2018 and is supported by the Bill & Melinda Gates Foundation. It aims to contribute to the reduction of hidden hunger by catalyzing sustainable investments in the utilization of biofortified crops at scale in Nigeria and Tanzania. The project adopts a multi-crop food basket approach and advocates for increased investment in the integration of biofortified food crops into food systems. It contributes to the sustainable solutions for addressing

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¹Micronutrient Initiative. 2013. Nigeria country profile (http://www.micronutrient.org/english/view.asp?x=596).

²NPC, ICF International. 2014. Nigeria 2013 Demographic and Health Survey. Abuja, Nigeria and Rockville, Maryland, USA: NPC and ICF International.

³Ehikioya, A., Adanikin, O. 2012. 11 million Nigerian children are malnourished. A report (http://www.A life free from hungerinternational.org/url.cfm. Accessed 13 May 2017).

⁴NPC, ICF International. Nigeria 2013 Demographic and Health Survey. Abuja, Nigeria and Rockville, Maryland, USA: NPC and ICF International. 2014.

⁵Bouis, H.E. 2002. Plant breeding: A new tool for fighting micronutrient malnutrition. *Journal of Nutrition* 132:491–494.

micronutrient malnutrition especially in the vulnerable groups of young children and women. The crops it promotes are high iron and zinc beans, pro-vitamin A maize (orange maize), orange-fleshed sweet potatoes (OFSP) and yellow cassava. The project is implemented by a consortium led by the International Potato Center (CIP) and incorporating six core partners, which are the International Center for Tropical Agriculture, the International Maize and Wheat Improvement Center, the International Institute of Tropical Agriculture (IITA), HarvestPlus, and the Forum for Agricultural Research in Africa, together with national institutions.

1.3 Objectives

The BNFB project has two specific objectives:

- Strengthen the enabling environment for increased investments in biofortified crops;
- Strengthen institutional and community capacities to produce and consume biofortified crops.

2. Key issues relevant to Nigerian biofortification advocacy

The BNFB project was preceded by a context situation analysis carried out in April 2016 to gather baseline information with respect to biofortification in Nigeria. The situation analysis identified several key issues relevant to the objectives of the project, and which form the basis for this advocacy strategy:

- There is low awareness on the existence and benefits of biofortified crops among consumers and farmers in Nigeria Awareness on the existence and benefits of biofortified crops is critical to their adoption by farmers, while for consumers awareness on the health benefits of the crops is one of the determining factors in their consumption. The situation analysis found that the main sources of information for farmers and consumers on the existence of biofortified crops were informal systems such as markets and friends. The nature of these sources probably had a role in the low awareness on the existence and benefits of the biofortified crops among farmers and consumers in the study area. Raising awareness among the general public on the existence and health benefits of biofortification is critical in strengthening the enabling environment for increased investments in biofortified crops and the institutional and community capacities to produce and consume biofortified crops.
- Disadvantaged groups are limited by social and economic constraints from accessing and benefiting from biofortification The situation analysis indicated that disadvantaged groups, especially women farmers in rural communities, were faced with several bottlenecks that limited their capacity to access and benefit from biofortification. These constraints included cultural and individual preferences relating to product attributes, credit market inefficiencies, poor access to information, input and output market inefficiencies and low educational qualifications. In view of the health and economic benefits of biofortification, addressing the constraints faced by disadvantaged groups will not only increase their access to and the benefits from biofortification but also help to strengthen the communities' capacities to produce and consume biofortified crops.
- Investments in food-based approaches and nutrition-sensitive agriculture are largely donor supported The situation analysis revealed that investments in food-based approaches and nutrition-sensitive agriculture are dominated by international donor funds. There are two sources of funding for biofortification in Nigeria, which are the internal and

external sources. The internal source is mainly the federal government. The main external sources include HarvestPlus and the Bill & Melinda Gates Foundation. Bill & Melinda Gates Foundation is the most important investor in biofortification programs in Nigeria. USAID-Nigeria also has an appreciable investment in biofortification through Catholic Relief Services. Anecdotal evidence indicates that developed countries are reprioritizing domestic health spending and this will likely lead to drastic reductions in investments from donors and development partners, hence there is need for increased internal funding for food-based approaches and nutrition-sensitive agriculture in Nigeria. Increasing internal investment funds for biofortification is critical to strengthen the enabling environment for increased investments in biofortification and the institutional and community capacities to produce and consume biofortified crops.

- Biofortification has low prioritization in national policies in Nigeria According to the situation analysis, five key policies target malnutrition in Nigeria. These are the Agricultural Promotion Policy (2001), the National School Health Policy of the Ministry of Education (2006), the National Science, Technology and Innovation Policy of the Ministry of Science and Technology (2012), the National Guidelines on Micronutrients' Deficiencies Control in Nigerian (2013) and the National Policy on Food and Nutrition (2016). Only two of these policies specifically mention biofortification as a strategy for addressing micronutrient deficiency. These are the National Policy on Food and Nutrition launched September 2016 and the National Guidelines on Micronutrients' Deficiencies Control in Nigeria. The main gaps with respect to policy support for biofortification are the focus of the nutrition policies on direct interventions, largely neglecting food-based approaches, and the continuous focus on increasing the yields of staple crops.
- The capacity of processors of biofortified crops is low and linkages among value chain actors are poor Biofortified crops are underutilized industrially owing to the limited awareness on commercial biofortified products and the low capacity in product development. Other bottlenecks include poor linkages among the key actors in the value chain, who are seed producers, farmers, processors, marketers and consumers, and the general poor coordination and collaboration among the stakeholders.

3. Objectives and targets of the BNFB Nigeria advocacy strategy

This strategy aims to influence the adoption of food-based approaches to address micronutrient deficiency in Nigeria through advocating for increased investments in biofortification and enhancement of institutional and community capacities to produce and consume biofortified crops. It focuses on six broad aims:

- Increase awareness on the existence and nutritional and economic benefits of biofortified crops among the public;
- Address the social and economic constraints preventing disadvantaged groups from accessing and benefiting from biofortification;
- Promote investments in biofortified crops to address micronutrient deficiencies in Nigeria, especially vitamin A deficiency;
- Promote the prioritization of biofortification in national nutrition policies in Nigeria;
- Build the capacity of farmers on the best agronomic practices for biofortified crops and that
 of processors on processing and product development;
- Promote linkages and coordination among value chain actors of biofortification in Nigeria.

4. Strategies and approaches

The advocacy strategy and approaches to be used will depend on the target stakeholders and the level and type of engagement required of them. The engagement required of the stakeholders, in turn, will depend on the reason that they were selected for advocacy. To be effective, an advocacy strategy must first articulate the purpose of engaging each particular stakeholder, the role that the stakeholder is required to play and the extent to which the stakeholder is expected to be engaged. There are six levels of engagement: increase awareness on the existence, nutritional and economic benefits of biofortified crops; address the social and economic constraints preventing the disadvantaged groups from accessing and benefiting from biofortification; promote investments in biofortified crops to address micronutrient deficiencies in Nigeria, especially the deficiencies in vitamin A and iron; promote the prioritization of biofortification in national nutrition policies in Nigeria; build the capacities of farmers on best agronomic practices and that of processors on nutrient-bioavailable processing of biofortified crops; and promote the linkages among value chain actors in biofortification in Nigeria (see the Appendix for detail). Stakeholders will be involved based on the anticipated level of their influence in the project.

4.1 Media advocacy

Media advocacy is the strategic use of the mass media to advance a social or public policy initiative. It uses a range of media and advocacy strategies to define the problem and stimulate broad-based coverage. Media advocacy attempts to reframe and sharpen public discussion to increase support for and to advance public health policies. The effectiveness and efficiency of media advocacy to enhance awareness and knowledge on the benefits of social issues and policies are well recognized in the literature. 8

The BNFB advocacy activities will select appropriate media through which target audiences can be reached. Some of these will include the National Television Authority, Africa Independent Television, and Federal Radio Corporation of Nigeria, along with private media organizations in Nigeria. Media personnel will be targeted with awareness creation activities. They will also help to ensure widespread awareness creation on biofortification among the general population.

4.2 Community mobilization

Community mobilization is based on the simple premise that human beings are by nature social creatures whose behaviors, attitudes and beliefs are profoundly affected by the norms of the communities in which they live. Community mobilization is the process of engaging communities to change the norms within their own population, and by its very nature it tends to be a primary level intervention.

⁶ Federal Ministry of Agriculture and Rural Development. 2015. Mainstreaming nutrition into agriculture in Nigeria: Situation analysis and evidence building. Study commissioned in by the Federal Ministry of Agriculture and Rural Development.

⁷ US Department of Health and Human Services. 1989. Media strategies for smoking control: Guidelines. Washington, D.C.: NIH Publication, 89–3013.

⁸ Iyengar, S. 1991. Is anyone responsible? How television frames political issues. Chicago: University of Chicago Press.

In the BNFB project, the goal of community mobilization will be to engage the community itself in activities that can promote the production and consumption of biofortified crops at the level of its population. Several existing community-based events will be leveraged to promote the production and consumption of these crops. These include festivals and national immunization days and other commemorated days or occasions focusing on public health topics such as the World AIDS Day, Health Week, World Food Day, Children's Day, etc. Other events that will be organized include rallies or marches and food fairs for demonstration of biofortified crop recipes.

4.3 Capacity building

Capacity building encompasses human resource development as an essential part of development. It is based on the concept that education and training lie at the heart of development efforts and that without them most development interventions will be ineffective. It focuses on a series of actions directed at helping individuals in the development process to increase their knowledge, skills and understanding and to develop the attitudes needed to bring about the desired developmental change.⁹

In the BNFB project, farmers' capacity will be built on the best agronomic practices through on-field demonstrations, basic empowerment for enhanced productivity, and re-orientation of farming for business rather than as a hobby. Similarly, the technical capacity of processors will be enhanced through training on processing techniques for a broad range of biofortified crop products.

4.4 Advocacy for policy-makers

The goal of this work will be to influence decisions made by officials in government, particularly legislators or members of regulatory agencies. It will include all attempts to influence legislators and officials, whether by other legislators, constituents of a legislator or organized groups.

In the advocacy strategy for the BNFB project, policy-makers at all levels will be targeted to ensure that the existing policies that support food-based approaches to vitamin A deficiency, and especially biofortification, are implemented in such a way that OFSP, yellow cassava and orange maize are prioritized as crops of choice. BNFB will advocate for resource allocation for biofortification activities and also during the periodic reviews of the nutrition, health and agricultural policies to ensure that these polices will be used for disseminating information on the benefits of biofortification. In addition to government officials, representatives of donor groups and businesses will be targeted.

4.5 Innovation platform approach

An innovation platform is a space for learning and change. It gathers in one group individuals with different backgrounds and interests such as farmers, traders, food processors, researchers, government officials etc. The individuals, who often represent organizations, come together to diagnose problems, identify opportunities and find ways to achieve their goals. They may design and implement activities as a platform or coordinate activities undertaken by individual members.

The innovation platform approach will be employed in the BNFB project to bring all biofortified crops value chain actors into a single platform within which the challenges faced by each can be

⁹ https://www.gdrc.org/uem/capacity-define.html

addressed. Effort will be made to include in the platform representatives of all the actors, including policy-makers, seed companies, input dealers, financial institutions, processors, researchers, extension agents, marketers, transporters, the National Variety Release Committee, agricultural development programs (ADPs) and farmers, among others.

4.6 Advocacy messaging

In addition to advocacy approaches, advocacy messages are very important components of an advocacy strategy. The environments in which target audiences and stakeholders operate are different and it is important to situate advocacy efforts within those environments. Operating environments define the mandates and key performance indicators of stakeholders and consequently their incentives to act or not to act. Further, each operating environment will have champions or advocates, indifferent actors and opponents. Advocacy messages must therefore be carefully designed for each operating environment to promote the necessary action and minimize opposition. Such messages are those that motivate stakeholders to see an issue, in this case biofortification and the BNFB project, as being in line with the mandate of their organization and as a means of improving their operating environment. For the BNFB project, the important operating environments include the agriculture, health, nutrition, development, manufacturing, trade, consumer, and consumer-protection sectors.

5. Targets for Nigerian advocacy efforts and the rationale

The advocacy strategy will target a wide array of influential audiences, including:

- Government officials executives, especially governors, ministers, commissioners and permanent secretaries from the ministries of agriculture, health, finance, women affairs and social development, and parliamentarians at the national and state levels across the federation;
- Multilateral and bilateral organizations and other development partners African Alliance,
 African Development Bank Group, Bill & Melinda Gates Foundation, Canadian International
 Development Agency, Food and Agricultural Organization of the United Nations, Oxfam,
 United Kingdom Department for International Development, United Nations Children's
 Fund, USAID, the World Bank, World Health Organization, civil society organizations, health
 workers, farmers' associations, processors' association, marketers' association, food
 industries, media, private sector, and the general public.

6. Implementation of the strategy

The matrix in the Appendix highlights the approaches, activities, indicators of success and assumptions/risks, etc. for each broad aim of the advocacy strategy. It presents summaries of advocacy activities for scaling up biofortification activities in Nigeria.

7. Monitoring, evaluation, and learning

Monitoring and evaluation (M&E) will be an essential component of the BNFB advocacy strategy. This will facilitate the objective tracking of progress towards the achievement of the objectives and performance of the BNFB advocacy strategy. M&E will provide the means for accountability and tracking of the delivery of results. It will also offer the tools for collection, collation, analysis and dissemination of results to enhance learning. Monitoring will entail regular collection and analysis of information during the implementation of the strategy to assist in timely decision-making. Every

component of this strategy will be monitored routinely. Monthly activity reports will be requested from the advocates. Also, quarterly review meetings will be held with partners and advocates to ensure that the project is on track at all times. Ongoing monitoring will enable BNFB partners to take stock of the project's implementation status and to see if biofortification advocacy is proceeding according to plan or if changes need to be made. A mid-term evaluation of this strategy will be conducted to determine the progress towards the achievement of outcomes. The report from that evaluation will chart the course for improving the methodology. A final evaluation will be conducted to highlight the results and key successes, as well as the challenges faced during project implementation. A final evaluation report will showcase the results achieved, challenges and lessons learned.

Appendix: Advocacy plans based on the six broad aims of the strategy

Table A1: Increase awareness on the existence and nutritional and economic benefits of biofortified crops

Objectives	Success indicators	Targets	Advocacy approaches	Advocacy activities	Allies	Risks and assumptions	Time frame
Raise awareness on the health, nutritional and economic benefits of biofortified crops among policy-makers and decision-makers	 Number of policy-makers and decision-makers reached by December 2018 Number of radio and television jingles on the health, nutritional and economic benefits of biofortified crops produced and aired by December 2018 Number of advocacy visits to federal, state and local government bodies by December 2018 Number of policies with biofortification as a strategy for addressing micronutrient deficiency 	 Ministers, permanent secretaries and budget officers of agriculture, health, finance Senior Special Adviser to the President on MDGs; Senate, house of assembly and house of representatives Committees on agriculture, health and appropriation Governors across the federation State Committee on Agriculture Commissioners for agriculture, health, finance and local government Local government chairpersons 	Advocacy Sensitization Mass media Print Media	 One-on-one meetings Strategic advocacy, sensitization meetings and visits with policy-makers and decision-makers Dialogue and roundtable discussion Newspaper articles, fliers Radio and TV jingles and discussion programs Field visits with government officials to biofortified farms and sites 	CIP and partners taking the leading role HarvestPlus, IITA, ARMTI, NRCRI ADPS Executives of farmers' associations Processors and marketers' associations NGOS CBOS	Competing priorities related to health and development issues Misconception that biofortified crops are GMOs Government's dwindling financial resources	January 2016– December 2018
Raise awareness on the health, nutritional and economic benefits of biofortified crops among the general public	 Number of radio and television jingles on the health, nutritional and economic benefits of biofortified crops produced and aired by December 2018 Number of newspaper articles on the nutritional and economic benefits of biofortified crops Percentage of the Nigeria 	 Media, including print and electronic NGOs Civil society organizations CBOs Market women's associations Farmers' associations Faith-based association in Nigeria MDAs 	 Advocacy Sensitization and exhibitions Mass media 	 One-on-one meetings Strategic advocacy and sensitization meetings with faith leaders, community associations, media etc. Dialogue and roundtable discussion Newspaper articles, fliers Radio and TV jingles 	 CIP and partners taking the leading role HarvestPlus, IITA, ARMTI, NRCRI ADPs Executives of farmers' associations Processors and marketers' 	Misconception that biofortified crops are GMOs Low priority accorded to health issues	January 2016– December 2018

Objectives	Success indicators	Targets	Advocacy approaches	Advocacy activities	Allies	Risks and assumptions	Time frame
Raise awareness	population aware of the nutritional and economic benefits of biofortified crops by 2018 • Percentage of farmers and	 Educational institutions Health institutions Media, including print and 	Advocacy	and discussion programs • One-on-one meetings	associationsNGOs and CBOsMediaCIP and partners	Misconception	Ongoing
on the health, nutritional and economic benefits of biofortified crops among farmers and consumers in Nigeria	consumers aware of the health, nutritional and economic benefits of biofortified crops in Nigeria by December 2018 Number of radio and television jingles on the health, nutritional and economic benefits of biofortified crops produced and aired by December 2018	electronic houses NGOs and civil society CBOs Market women's associations Farmers' association Faith-based associations in Nigeria	Sensitization Mass media Print media	 Strategic advocacy and sensitization meetings with faith-based leaders and farmers' associations Dialogue and roundtable discussion Newspaper articles and fliers Radio and TV jingles and discussion programs 	taking the leading role HarvestPlus, IITA, ARMTI, NRCRI ADPs Executives of farmers' associations Processors and marketers' associations NGOs and CBOs Media	that biofortified crops are GMOs Poor access to farm inputs Low literacy level among farmers and consumers Low priority accorded to health issues	

Table A2: Address the social and economic constraints preventing the disadvantaged groups from accessing and benefiting from biofortification

Objectives	Success indicators	Targets	Advocacy approaches	Advocacy activities	Allies	Risks and assumptions	Time frame
Advocate for increased access to credit facilities for the disadvantaged groups	Percentage of disadvantaged groups with access to credit facilities by December 2018 Percentage of biofortified crop farmers with access to credit facilities by December 2018	Women's groups and associations in rural communities Farmers' associations in rural communities Biofortified crop farmers Rural youth Financial institutions	Advocacy Sensitization Mass media Print media Innovation platform approach Community mobilization	One-on-one meetings Strategic advocacy and sensitization meetings with financial institutions Meetings of biofortified crops value chain actors under the innovation platform approach Strategic advocacy meetings with communities	CIP and partners taking the leading role HarvestPlus, IITA, ARMTI, NRCRI ADPS Executives of women's associations NGOs and CBOs Financial institutions	Misconception that biofortified crops are GMOs Weak collateral security base of the disadvantaged groups	January 2016– December 2018
Advocate for increased access to markets for disadvantaged groups	Percentage of biofortified crop farmers with access to markets by December 2018	 Women's groups and associations in rural communities Farmers' associations in rural communities Biofortified crop farmers Rural youth Financial institutions 	 Advocacy Sensitization Innovation platform approach Community mobilization 	 One-on-one meetings Strategic advocacy meetings with financial institutions Innovation platform approach Community mobilization Radio and TV jingles 	 CIP and partners taking the leading role HarvestPlus, IITA, ARMTI, NRCRI ADPs Executives of women's associations NGOs and CBOs 	Misconception that biofortified crops are GMOs Low productivity of biofortified crops grown by the disadvantaged groups	January 2016– December 2018
Advocate for behavior change around cultural preferences among disadvantaged groups around biofortified products' attributes	Percentage of women preferring biofortified crops/ products to conventional ones	Women's groups and associations in rural communities Farmer's associations in rural communities Farmers and consumers Rural youth	 Advocacy Sensitization Mass media Innovation platform approach 	One-on-one meetings Strategic advocacy meetings with women's groups, faith-based leaders Innovation platform approach Radio and TV jingles	 CIP and partners taking the leading role HarvestPlus, IITA, ARMTI, NRCRI ADPs Executives of women's associations NGOs and CBOs 	Misconception that biofortified crops are GMOs Cultural and traditional belief systems in some communities may be difficult to change	January 2016– December 2018

Table A3: Promote investments in biofortified crops to address micronutrient deficiencies in Nigeria, especially the deficiencies in vitamin A and iron

Objectives	Success indicators	Targets	Advocacy approaches	Advocacy Activities	Allies	Risks and assumptions	Time frame
Advocate for mainstreaming of biofortification funding in relevant government plans and budgets at all levels – national, state and local	Number of MDAs and states reflecting investment in biofortification in their budgets by December 2018 Number of senior government officials reached through advocacy by December 2018 Amount of funding mobilized for new biofortified crop investments by 2018	 Federal, states and LGAs Members of the national and state houses of assembly Parliamentarians MDAs G8 New Alliance for Food Security and Nutrition AGCO, Agro-Allied Syrups, Dansa Holdings Ltd., Unilever, Umza International Farms Ltd., Dangote 	 Advocacy Sensitization Mass media Print media 	 One-on-one meetings Strategic advocacy and sensitization meetings with national, state and LGA officials Media briefing, etc. Dialogue and roundtable discussions with parliamentarians Newspaper articles and fliers Radio and TV jingles and discussion programs 	 CIP and partners taking the leading role HarvestPlus, IITA, ARMTI, NRCRI ADPs NGOs and CBOs Media 	 Misconception that biofortified crops are GMOs Government's dwindling financial resources 	Jan 2016– December 2018
Mobilize private sector support for investment in biofortified crop production, processing, marketing and utilization	Number of private sector operators investing in biofortification by December 2018 Amount of investment in biofortification by the private sector by 2018	G8 New Alliance for Food Security and Nutrition AGCO, Agro-Allied Syrups, Dansa Holdings Ltd, Unilever, Umza International Farms Ltd., Dangote Commercial banks Oil companies	 Advocacy Sensitization events and exhibitions Mass media Print media 	 One-on-one meetings Strategic advocacy meetings with G8 New Alliance for Food Security and Nutrition, companies, commercial banks, oil companies etc. Dialogue and roundtable discussions Newspaper articles and fliers Radio and TV jingles and discussion programs 	 CIP and partners taking the leading role HarvestPlus, IITA, ARMTI, NRCRI ADPs NGOs and CBOs Media 	Misconception that biofortified crops are GMOs Low productivity of biofortified crops may act as a disincentive to private sector investment in them	January 2016– December 2018

Objectives	Success indicators	Targets	Advocacy approaches	Advocacy Activities	Allies	Risks and assumptions	Time frame
Advocate for more investment in research for the release of more varieties of OFSP and maize	Number of new varieties of OFSP and maize released by the National Variety Release Committee by mid-2018 Amount of funding mobilized for investment in research on new biofortified crops by 2018	G8 New Alliance for Food Security and Nutrition AGCO, Agro-Allied Syrups, Dansa Holdings Ltd., Unilever, Umza International Farms Ltd., Dangote Commercial banks Oil companies Research institutes National Variety Release Committee	 Advocacy Sensitization Mass media Print media 	 One-on-one meetings Strategic advocacy meetings with G8 New Alliance for Food Security and Nutrition, companies, commercial banks, oil companies etc. Dialogue and round table discussions Newspaper articles and flyers Radio and TV jingles and discussion programs 	ARMTI, NRCRI	High level bureaucratic processes involved in the release of new varieties by the National Variety Release Committee may delay the process of release	Mid-2018

Table A4: Promote the prioritization of biofortification in national nutrition policies in Nigeria

Objectives	Success indicators	Targets	Advocacy approaches	Advocacy activities	Allies	Risks and assumptions	Time frame
Advocate for mainstreaming of biofortification and food-based approaches into national and subnational nutritional policies	 Number of national agriculture and nutrition policies prioritized that have with biofortification by 2018 Number of subnational agriculture and nutrition policies prioritized that have biofortification by 2018 	 Ministers, permanent secretaries and budget officers of agriculture, health, finance Senior special adviser to the president on Sustainable Development Goals Senate, house of representatives and house of assembly Committees on agriculture, health and appropriation Governors across the federation State Committee on Agriculture Commissioners for agriculture, health, finance and local government Local government chairpersons 	Advocacy Sensitization Mass media Print media	One-on-one meetings Strategic advocacy meetings with ministers, permanent secretaries and budget officers of agriculture, health and finance; senior special adviser to the president on Sustainable Development Goals; senate; house of representatives and house of assembly Media advocacy	 CIP and partners taking the leading role HarvestPlus, IITA, ARMTI, NRCRI ADPs NGOs and CBOs Media 	 Misconception that biofortified crops are GMOs Competing priorities related to health and development issues Government's dwindling financial resources 	January 2016– December 2018

Table A5: Build the technical capacity of farmers on best agronomic practices for biofortified crops and technical processing capacity of processors of biofortified crop

Objectives	Success indicators	Targets	Advocacy approaches	Advocacy activities	Allies	Risks and assumptions	Time frame
Increase farmers' knowledge on best agronomic practices for biofortified crops	Number of farmers trained on best agronomic practices for biofortified crops by 2018	Farmers and processors of biofortified crops	 Capacity building/training programs Demonstration farms Community mobilization 	 One-on-one meetings Strategic advocacy meetings with farmers' associations and processors Newspaper articles and fliers Radio and TV jingles and discussion programs 	 CIP and partners taking the leading role HarvestPlus, IITA, ARMTI, NRCRI ADPs Executives of farmers' associations NGOs and CBOs Media 	Low productivity of biofortified crop Cultural and traditional belief systems in some communities may hinder adoption of new farming systems and processing techniques	January 2016– December 2018
Increase processors' knowledge on best processing and packaging techniques for biofortified crops	Number of processors trained on best processing and packaging techniques for biofortified crops by 2018 Number of commercial processors Processing biofortified food products	Farmers and processors of biofortified crops	 Capacity building/training programs Demonstration plants Community mobilization 	One-on-one meetings Strategic advocacy and sensitization meetings with processors Radio and TV jingles and discussion programs	BNFB Project partners with CIP taking the leading role HarvestPlus, IITA, ARMTI, NRCRI ADPs NGOs/CBOs Media	Misconception that biofortified crops are GMOs Low productivity of biofortified crops Cultural and traditional belief systems in some communities may hinder adoption of new farming systems and processing techniques	January 2016– December 2018

Table A6: Promote the linkages among value chain actors in biofortification in Nigeria

Objectives	Success indicators	Targets	Advocacy approaches	Advocacy activities	Allies	Risks and assumptions	Time frame
Facilitate establishment of an innovation platform for biofortified crop value chain actors	Number of Innovation platforms established across the federation by 2018	 Biofortified crop farmers Farmers' associations ADPs Seed companies Financial institutions Processors Extension agents Policy-makers Researchers Marketers Vines multipliers All biofortified crop value chain actors 	mobilization • Sensitization • Innovation platform approach	 Innovation platform establishment Strategic advocacy meetings with value chain actors Radio and TV jingles and discussion programs Community mobilization 	 CIP and partners taking the leading role HarvestPlus, IITA, ARMTI, NRCRI ADPs NGOs and CBOs Media 	It may be difficult bringing all the value chain actors into a single platform	January 2016– December 2018
Enhance farmers' access to inputs	Number of biofortified crop farmers with access to inputs by 2018	Biofortified crop farmers Farmers' associations ADPs Seed companies Financial institutions Extension agents Policy-makers Marketers Vines multipliers All biofortified crop value chain actors	Community mobilization Sensitization Innovation platform approach	Innovation platform establishment Strategic advocacy meetings value chain actors	CIP and partners taking the leading role HarvestPlus, IITA, ARMTI, NRCRI ADPs Executives of farmers' associations Marketers' associations NGOs and CBOs	Farmers may lack the financial capacity to purchase the inputs from seed companies owing to their high level of poverty	January 2016– December 2017

Objectives	Success indicators	Targets	Advocacy approaches	Advocacy activities	Allies	Risks and assumptions	Time frame
Enhance processors' access to markets	Number of processors of biofortified crops with access to markets by 2018	 Biofortified crop processors Farmer associations ADPs Inputs dealers 	Community mobilization Sensitization Innovation platform approach	Innovation platform establishment Strategic advocacy meetings with value chain actors Radio and TV jingles and discussion programs Community mobilization	CIP and partners taking the leading role HarvestPlus, IITA, ARMTI, NRCRI ADPS Executives of farmers' associations Processors and marketers' associations NGOs and CBOs Media	Processors may lack the financial capacity to purchase processing equipment owing to their high level of poverty	January 2016– December 2017
Improve the effectiveness and efficiency of biofortified crop seed system	The percentage of farmers with enhanced access to biofortified crop seed companies	 Biofortified crop farmers Farmers' associations ADPs Seed companies Financial institutions Processors Extension agents Policy-makers Researchers Marketers Vines multipliers All biofortified crop value chain actors 	Community mobilization Sensitization Innovation platform approach	Innovation platform establishment Strategic advocacy meetings with value chain actors Radio and TV jingles and discussion programs Community mobilization	CIP and partners taking the leading role HarvestPlus, IITA, ARMTI, NRCRI ADPS Executives of farmer associations Marketers' associations NGOs and CBOs	Farmers may lack the financial capacity to purchase seeds from the seed companies	January 2016– December 2017

Building Nutritious FoodBaskets **The Building Nutritious Food Baskets:** Scaling up Biofortified Crops for Nutrition Security seeks to reduce hidden hunger by catalyzing sustainable investment for the production and utilization of biofortified crops (Orange-fleshed sweetpotato (OFSP); vitamin A (yellow) cassava, vitamin A (orange) maize and high iron/zinc beans) at scale. The project is implemented in **Nigeria** and **Tanzania**, to demonstrate how biofortified crops can be scaled up through a multi-crop ("food basket") approach. BNFB draws on complementary expertise for scaling up through a partnership between CGIAR centers and programs, regional organizations and other public and private sector agencies to create a movement that will eventually reach the target populations. BNFB's hypothesis is that scaling up is dependent on supportive policy environment, strong institutional capacities and availability of proven technologies.





















