# Jumpstarting orange-fleshed sweetpotato in West Africa through diversified markets – is accelerating towards outcomes ...





Various OFSP processed products



H.E. Mr. Kofi and Mrs. Nane Annan's **3rd visit to Ghana**, 15 Aug 2016

#### Prepared by

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7<sup>th</sup> Sweetpotato for Profit and Health Initiative Meeting 7 – 8 October 2016

Addis Ababa, Ethiopia



Promouvoir la patate douce à chair orange en Afrique de l'Ouest à travers des marchés diversifiés





Multiplication - drip irrigation; **Burkina Faso** 

## **Outline**

- Introduction
- Progress & Achievement
- What remains to be done in the last 6 months
- Exit Strategy





Dry season production under irrigation; **Ghana** 



Retailers at Bobo market, Burkina Faso



O-Meals - School Feeding, Nigeria

Jumpstarting OFSP is a three-year pilot project funded by Bill & Melinda Gates Foundation

### **OUR VISION**

Sweetpotato a Profit and Holla Initiative

Sustainable and inclusive market-driven approaches for orange-fleshed sweetpotato (OFSP) to increase incomes, and improve health through consumption of vitamin A rich OFSP, especially in women and children in Ghana, Nigeria and Burkina Faso.

#### **PROJECT OUTCOMES**

- 1. Formal and informal diversified OFSP market opportunities developed in pilot areas in Ghana, Nigeria, and Burkina Faso.
- 2. Viable QDPM seed system in target areas capable of expansion in response to increased demand.
- 3. Households, including women and children, in target areas have increased vitamin A consumption from OFSP.
- 4. Commercial sweetpotato planting material and OFSP producers, including women, increase income through participation in OFSP value chains.



#### Where are we working in West Africa? and How do we achieve our target? – establish strong partnerships



Initiative

















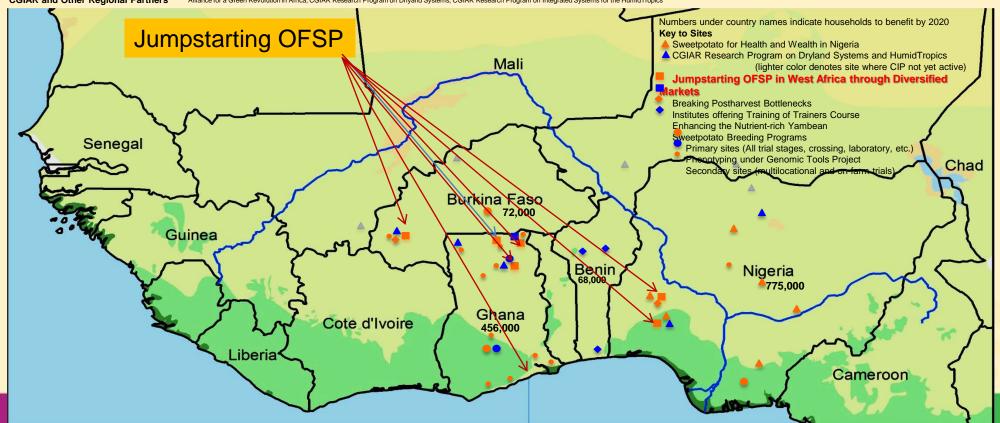


Key NARS Partners

Ghana: Council for Scientific and Industrial Research (CSIR)-Crops Research Institute, CSIR-Savanna Agricultura, Research Institute, Ministry of Food and Agriculture, Ghana Health Service, University for Development Studies, Kwame Nkrumah University of Science and Technology Nigeria: Federal Ministry of Agriculture and Rural Development, National Root Crops Research Institute, Agricultural Development Programmes, Federal University of Agriculture Abeokuta, Offa Polytecnic, Bayero University Kano, Osun Elementary School Feeding and Health Programme

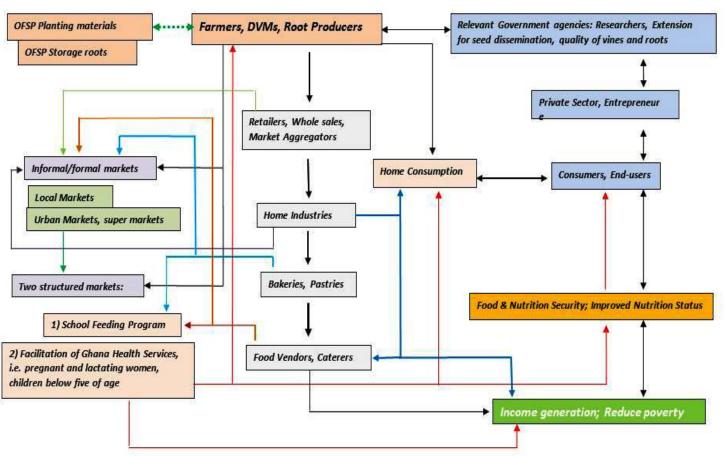
Key NGO Partners Burkina Faso: Institut de l'Environnement et de Recherches Agricoles, Centre Agricole Polyvalent Matourkou, Directions Provinciales de l'Agriculture, de l'Hydraulique et des Ressources Halietiques; Benin: Institut National de Recherches Agricoles du Benin

Ghana: iDE-Ghana, Association of Church Based Development Projects, Catholic Relief Service, Partnership for Child Development (PCD), Farm Radio International (FRI); Nigeria: Helen Keller International, PCD; Burkina Faso: iDE-Burkina Faso; Benin: Børnefonden **CGIAR and Other Regional Partners** Alliance for a Green Revolution in Africa, CGIAR Research Program on Drlyand Systems, CGIAR Research Program on Integrated Systems for the HumidTropics



#### We are working toward:

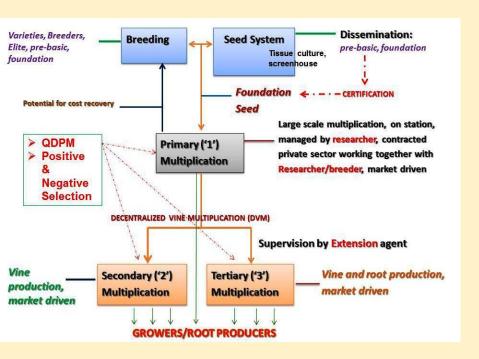


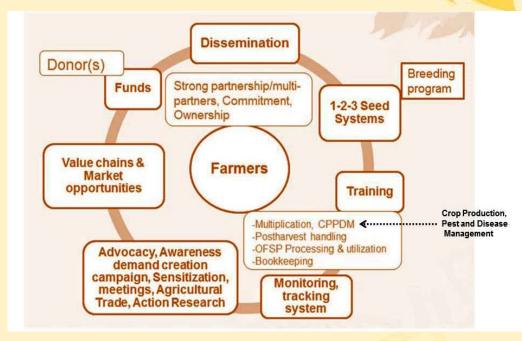


An integrated approach: public and private sector partnership to match into the four jumpstarting OFSP project outcomes

## The first and second Year of the project implementation, what did we need?







- 1. Linkage of seed system and breeding program
- 2. Elements required for functioning seed systems for its sustainability

Overview the household numbers (direct or indirect) benefited from the orange-fleshed sweetpotato vitamin A powerhouse in Ghana, Nigeria and Burkina Faso: April 2014 through July 2016 (to be continued ...)



Indicator variables	(4 Apr	Year 1 il 2014-31 2015) Nigeria	March Burkina	Year 2 (1 April 2015-31 March 2016)  Ghana Nigeria Burkina			Year 3 (1 April 2016-31 July, 2016)  Ghana Nigeria Burkina									Grand Total
				direct			% M	% F	direct	% M	% F	direct	% M	% F	direct	
Households reached with OFSP vines	2,466	6,334	784	2,461	5,000	1,883	31	69	3,362				78	22	193	22,483
No of people reached <sup>1</sup>	12,577	19,860		9,953	13,238	4,170	80	20	4,181	52	48	8,684	95	5	91	72,754
No of Pregnant Women Reached <sup>2</sup>	390	834		4,412	5,081	7		100	2,000							12,717
No of Breastfeedin g Women Reached <sup>2</sup>	641	1,013		2,674	-	-										4,328

#### **Continued table**

Year 1

Indicator

variables	(4 Арі	April 2014-31 March (1 April 2015-31 March (1 April 2016-31 July, 2016) 2015) 2016)										n (1 April 2016-31 July, 2016)								
	Ghana	Nigeria	Burkina	Ghana	Nigeria	Burkina		Ghana			Nigeria				na					
				direct			% M	% F	direct	% M	% F	direct	% M	% F	direct					
Pregnant, breastfeedin g and/or lactating women through Ghana Health Service intervention								100	4,745							4,745				
No of women reached <sup>3</sup>											100	133				133				
DVMs							10 0		15	100		8	92	8	48	71				
Total	16,074	28,041	784	19,500	23,319	6,053	31	69	14,303	51	49	8,825	84	16	332	117,231				

Year 3

Year 2



#### Jumpstarting year 3 areas of focus (period: 1 April 2016 to 31 March 2017):

- > Strengthen seed system (QDPM) implementation: on-going activities
- > Expanding and documenting formal and informal markets for fresh roots and processed products, i.e. bread is one of the most promising product (Ghana, Nigeria)
- Solidify M+E systems
- ➤ Solidifying and expanding partnerships to reach more than one million households by 2020 This will be explained more by Dr. Souleimane Adekambi, our M&E specialist
- > Continuing learning from Ghana Health Service intervention: Willingness to pay
- School Feeding Pilot project in Ghana
- This will be presented by Mr. Joseph Nchor Implementing Partner: ACDEP

Annual Work Plan revised, including who is responsible for what and time frames,

	Activities to Reach In	Output	Indicators	Annual Target	Country	target	Responsible	Timeline
			al diversified OFSP market op	oportunities developed	in pilot areas in	Ghana, Nigeria, and E	turkina Faso	(April 2016- May 17)
Inte	rmediate Outcome 1.1 Market deman		FSP 2 Increased knowledge of the	benefits of vitamin A	for health by bot	th men and women.		
15		Training	(1) Number of	(1) 310	Ghana	(1) 40	iDE Ghana /	Aug & Nov
	other value chain (VC) actors so that they have the necessary	report	marketers and other VC actors trained on		Nigeria	(1) 200	ADP/Ministry of health / Backstop by CIP	Aug & Nov
	knowledge of nutrition		knowledgeable of		Burkina	(1) 70	iDE Burkina Faso /	Aug & Nov
15	Designing additional	Promotion	(1) Number of	(1) 3 (2)	Ghana	(1) 1 (2)	CIP	Aug-Feb 17
	IEC (Information, Education, Communication)	al materials developed	additional promotional materials	10,000	Nigeria	(1) 1 (2) 2,500	ADP/Ministry of health/ / Backstop by CIP	Aug-Feb 17
	materials and radio	and	developed and		Burkina	(1) 1 (2)	iDE Burkina Faso /	Aug-Feb 17
16	Conduct awareness creation campaign in local markets with	Report on campaigns	(1) Number of awareness camapigns	(1) 3	Burkina Faso	(1) 3	iDE Burkina Faso/INERA / Backstop by CIP	Jan-Feb 2017
17	Design and implement radio and TV	Radio and TV	(1) Number of radio programs	(1) 2 (2) 1 (3) 20,000	Burkina Faso	(1) 2 (2) 1 (3) 20,000	iDE Burkina Faso/INERA /	Apr-Dec
18	Support CAP- Matourkou to organize	TOT organized	(1) Number of TOT trainings	(1) 1 (2) 30	Burkina Faso	(1) 1 (2) 30	INERA/CAP-M/iDE Burkina Faso /	Nov

 JS project Monitoring, Learning and Evaluation Plan developed, including who is responsible for what and time frames

Jumpsta	arting Year 3 Mon	itoring, Lear	rning and Evaluat	tion Plan							Apri	il	May	4	lune		
Associated Outcome in Results Framework	Activity	Country	Type (M- Monitoring/S- Survey/ODK-	Responsible	Time Frame for Collection		Research Questions We Committed to Answering	Tool (s)	Frequency	Comments			 w v		 d whs v	wk4 wk1	
1.262	Dissemination of vines	Ghana	м	CIP (EA); IDE (Desmond);		2nd half Aug	Number of beneficiaries by sex; % of vines that	Standard disseminatio	Collect	Monitoring needed to ensure					П		İ
1.1.2 6 2	Dissemination of vines	Nigeria	м	CIP (TF)	June-mid- Aug	2nd half Aug	Number of beneficiaries by sex; % of vines that are sold	Standard disseminatio n form	Collect monthly								
1.1.2 6 2	Dissemination of vines	Burkina Fa	sM	IDE (Ibrahim Koara)	June-mid- Aug	2nd half Aug	Number of beneficiaries by sex; % of vines that are sold	Standard disseminatio n form	Collect monthly								
226213	Characteristics of DVMs & their	Ghana	ODK-S midterm	CIP (EA)	June	2nd half Aug	Amount of land dedicated to OFSP and	DVM registration	Once		+	+		+		$\pm$	
226213	Characteristics of DVMs & their location	Nigeria	ODK	CIP (TF)	June	2nd half Aug	Amount of land dedicated to OFSP and SP by season; Socio- economic description	Includes GPS reading of farm	Once								

Training of EAs on the use of Andriod mobile tablets for DVMs
 & market data collection using ODK (OPEN DATA TOOLKITS),
 extend to OFSP root producers







In Ghana







In Burkina







In Nigeria



• Field Visits, as a purpose of validation of reported information – at any time & to any of the 3 countries,



OFSP field visit at Sokouraba, Burkina Faso - Photo credit I. Koara

Vine field visit at Osun jela, Nigeria-Photo credit O. Onabamiji Vine field visit, Ghana Photo credit I. Imoro

 Monthly (semi-annual & annual) Reports, as a selfassessment of the performance of the project,

Monthly reporting template¶ [Project Manager to Country Manager/¶		1. Accomplish	ments·¶	
Regional·Director·for·Projects·Regionally· Coordinated¶		Project∙ Outcome∙¤	Deliverables/outputs- for-the-quarterx	Progress/achievement-during-the- monthx
C.C.·SO·Leader·&·Regional·Projects·Manager]¶	1	1.Formal·and·	In-Ghana¤	¤
International·Potato·Center¶  Monthly·Report·for·the·period:·June·2016¶  Name·of·Project:·Jumpstarting·orange-fleshed· sweetpotato·in·West·Africa·through·Diversified·Markets	Sweet This-i captu	opportunitie s-developed¶ ¤	ror-rarmers-is-launched-g	(1) - IDE-Ghana-has-engaged-the- services-of-a-market-consultant- who-is-currently-working-on- identifying-formalized-end- markets-for-farmers-produce-to- ensure-that-production-is-based-
This·is·a·compiled·report·from·across·the·project·which-captures·input·by·partners·in·each·country·as·well·as·CIP-staff.··Monthly·discussion·report·with·Lauren·will·be-extracted·from·this·report.·¶  ¶ Submitted·by:·Ted·Carey,·Erna·Abidin,·Souleimane·	staf			on·the·demand·patterns·of· consumers.·The·outcome·of·this· exercise·will·form·basis· developing·production·targets·per- farmer·groups¶ (2) - CIP·entered·into·discussions·
				with-a-market-analysis-consultant-

# Year 3 Beneficiaries (Up to date) Sweetpotato

Me	Indicator Variables		Apri	l 1st, 201	l6 - Jun	e 30th, 2	016				Total (Up-to-date)
-	illuicator variables	Ghana				Nigeria			Burkin	3	3 countries
		Male	Female	Total direct	Male	Female	Total direct	Male	Femal e	Total direct	
1	Households reached with OFSP vines	1,050	2,312	3,362			0	150	43	193	3,555
2	Number of people reached*	3404	777	4,181	4506	4178	8,684	86	5	91	12,956
3	Number of Pregnant Women Reached**		2,000	2,000			0			0	2,000
4	Number Of Breastfeeding Women Reached**			0			0			0	0
5	Women without distinction of being pregnant, breastfeeding and/or lactating		4,745	4,745		133	133			0	4,878
6	DVMs	15		15	8		8	44	4	48	71
	Total	4,469	9,834	14,303	4,514	4,311	8,825	280	52	332	23,460



# Quick Main Midline Results

## **Household Introduction to OFSP**



#### Sampling approach:

- Selection of the respondents was limited to the project targeted zones (2 regions in GH & 5 communities in BF)
- Focus on two categories of farmers: Direct Beneficiaries (Treated) and Non Beneficiaries (Control)
- Ghana (Treated & Control 144, respectively) & Burkina (Treated 144 and Control 107)
- DVMs are also interviewed (but results not presented here)

#### Ghana

#### **Burkina**

	<b>C</b> (N=144)	<b>T</b> (N=144)	Overall (N=288)		C (N=144)	<b>T</b> (N=107)	Overall (N=251)			
Ever Heard Of OFSP	89%	100% 94%		Ever Heard Of OFSP	91%	100%	95%			
Main information sources				Main information sources						
Project's Partners	40%	10% 99%		Project's Partners	27.40 %	69.20	46.20%			
1 <sup>st</sup> time OSFP planted (2015)	90%	81%	83%	1 <sup>st</sup> time OSFP planted (2015)	80.80 %	90.60%	87.80%			

# Gross margin of vine production in Ghana Sweetpotato Burkina Faso

#### Ghana

# OFSP vine plot size (Ha) Total production cost per acre (USD/Ha) Gross margin of vine production per acre (USD/Ha) 243.49

#### Burkina

OFSP vine plot size (Ha)	0.52
Total production cost per hectare (USD/ hectare)	325.20
Gross margin of vine production per acre (USD/Ha)	591.16

# Cost-Benefit Analysis of OFSP production in Ghana & Burkina Faso



#### **Ghana:**

	<b>C</b> (N=144)	<b>T</b> (N=144)	Overal I <sub>(N=288)</sub>
%Producing OFSP	15%	38%	26%
OFSP plot size (Ha)	1.82	2.01	1.95
% of OFSP to total areas under SP	71%	86%	81%
% of purchased vines value out of the total vine value	45%	39%	41%
% vines costs from total production cost	56%	49%	51%
Yield (Kg/Ha)	960.11	734.48	799.79
Gross Margin (USD/Ha)	118.27	37.96	61.21

#### **Burkina:**

	C (N=144)	<b>T</b> (N=107)	Overal I (N=251)
%Producing OFSP	13%	49%	28%
OFSP plot size (Ha)	0.44	0.49	0.47
% of OFSP to total areas under SP	5%	17%	10%
% of purchased vines value out of the total vine value	16%	3%	7%
% vines costs from total production cost	36%	44%	42%
Yield (Kg/Ha)	2,811.11	4,140.93	3,778.25
Gross Margin (USD/Ha)	99.97	683.83	527.59

# **School Feeding Program in Nigeria**



☐ By mid-2015, **17 elementary schools** in Osun State, with over **8,000 pupils** receiving an OFSP meal once a week

☐ 1,910 students in 13 Osun State schools receive OFSP bread once a week

☐ In September, 2016, 100 additional schools around the state, with the possibility of further increase -→ 10 tons of OFSP required to feed 41,216 students weekly

## Next plans



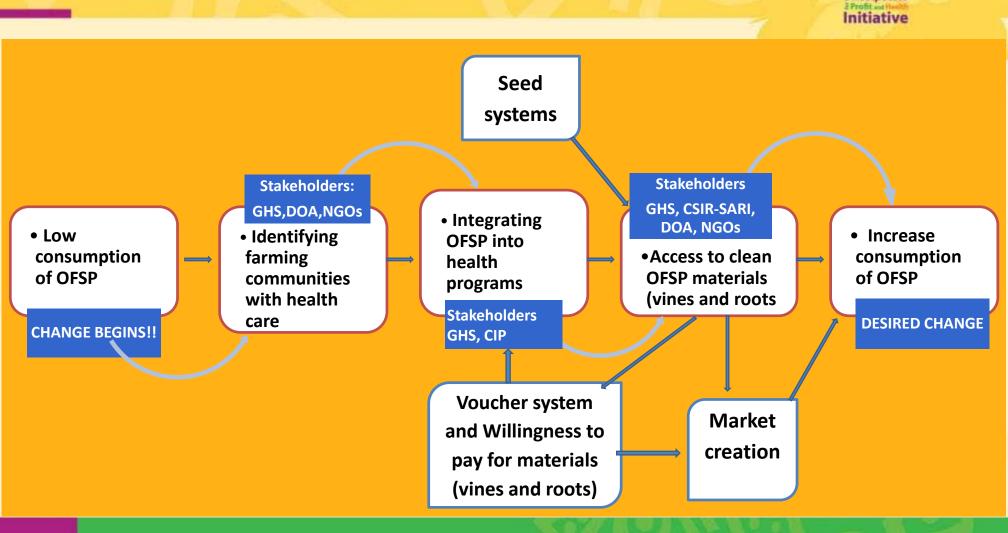
#### Among others....

- Conducting endline surveys of producers, DVMs
- Assessing contribution of GHS to OFSP consumption
- Analyzing Cost-Benefits of OFSP incorporation into Bread and contribution to OFSP root production



#### **GHANA HEALTH SERVICE INTERVENTION**

# OC 3: Households, including women and children, in target areas have increased vit A consumption from OFSP



## **Activities**



- Train staff of CHPS to incorporate OFSP into Infant & Young Child Feeding counseling
- Train health volunteers and community health nurses on OFSP counseling
- Cooking demos and training of pregnant and lactating mothers on recipes
- Community sensitization durbars on OFSP nutrition
- Training pregnant women, lactating mothers on OFSP nutrition and utilization
- Voucher system to disseminate vines/roots to pregnant and lactating mother

#### **GHANA SCHOOL FEEDING PILOT WITH OFSP**



□ OFSP-School feeding pilot started in June 2016 in 2 basic schools under the GSFP to achieve the ff outcomes:

1. Feeding school children with vit A-rich OFSP diets will improve child nutrition and combat VAD

2. OFSP School Feeding will increase market opportunities for local root producers and vines multipliers

## **The implementation Process**



Farmers see incentive and produce roots all-year

Institutional stakeholders planning meetings

Baseline
Survey + design
of M&E tools

Sensitization of schools on nutritional benefits

Monitoring & backstopping, feedback, scale up planning

Farmers-Caterers meetings; supplying roots Project launch
durbar:
stakeholders/co
mmunities'
sensitization

Training of cooks on nutritious menus

## **Roots Production**







## Achievements so far



- ☐800 pupils fed once each with nutritious but cheap OFSP diets
- □13 producers supplied 6,925kg of fresh roots (uninterrupted) to caterers valued at US\$1,212
- ☐ Strong producer-caterer linkage established:
  - potential structured market for producers
  - to increase production & consumption

## Feeding on OFSP menu







## Lessons and way forward



- School feeding has demonstrated a potential stable market for roots
- Producers can best capture the opportunity by allyear production with good storage practices
- Schools reported a higher attendance on OFSP feeding days, showing acceptability
- Plans to scale from pilot program

#### **EXIT STRATEGIES:**

Strategies for OFSP expansion and scaling intervention in Ghana, Burkina Faso and Nigeria



1. Do not exit and seek extension for Jumpstarting Phase 2 or other follow on project.

#### 2. **Exit**:

- 2.2. Determine the most successes of intervention which was piloted in the last three years to be scaled out or scaled in; prepare some concept notes and seek a number of respected donors for funding activities through a project or two
- 2.3. Partners have their capacities to carry on through their own investment on project.

#### For example:

- In Burkina Faso: NAFASO seed company now supplies QDPM OFSP to Min of Agric and NGOs
- > OFSP fresh market value change now runs on his own.
- > In Nigeria: school feeding continues for expansion within Osun State and Nationally.
- In Ghana: OFSP value continues through bakeries, school feeding and Ghana Health Services investment
- Value chains actors and partners continue on their own
  - → we have planned a meeting among the core IPs in the beginning of Nov 2016

#### THANK YOU VERY MUCH FOR YOUR ATTENTION!





#### **ACKNOWLEDGEMENT**

The Bill & Melinda
 Gates Foundation

 Governments and farmers and marketers From
The West Africa Team