



**Lessons learned from
pilot market-led value
chains in West Africa
(Jumpstarting
Project)**

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Presentation outline



Background

- Constraints before establishment of the project

Presentation

- Jumpstarting OFSP in West Africa

Project Achievement

- Project main results

Next Steps

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Constraints identified in West Africa and also before establishment of the market-driven OFSP seed systems

- Long dry season
- Water availability for 'seed'/planting material production
- Poor quality of source of planting material to start seed production, **unclear sources of planting material**, i.e. diseased plants, damaged vines by weevils, degenerated varieties, mixed varieties, etc.
- No isolation of seed production fields from old fields (good cultural practices)
- Unprotected fields from livestock
- No experienced or well trained DVMs or seed companies in Quality Declared Planting Material (QDPM) production
- Seed producers dominated by informal system producing local **white/yellow fleshed varieties**.
- **Under-developed seed systems, farmers received vines from**

Mostly farmers

WHY the market-driven OFSP seed systems



- The **market-led approach** is
 - marketing strategy in which a business seeks to **determine what products a consumer might want, and then moves to develop those products**. A market-led marketing strategy asks, "What do consumers want? How can we satisfy this want?"
- Main constraint: **Under-developed seed systems, farmers received vines from neighbors, friends, or from previous field. Mostly farmers got free planting materials**
- Objective was therefore to depart from markets to create sustainable value chains for OFSP that lead to increased incomes and improved health through consumption of vitamin A-rich OFSP

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



VISION

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.

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LEARNING QUESTIONS ASSOCIATED WITH EACH OUTCOME

Outcome 1: (1) What are the specific market models of Jumpstarting? (2) What is the cost of the pilot for each model?

Outcome 2: (1) What are the critical factors in producers' decisions to adopt or not adopt OFSP under different agro-ecological settings and different market conditions? (2) What can be done to decrease non-adoption?

Outcome 3: (1) How has Jumpstarting improved the nutritional knowledge among producers, traders, and consumers of OFSP, segregated by gender? (2) Does improved knowledge lead to increased consumption of OFSP?

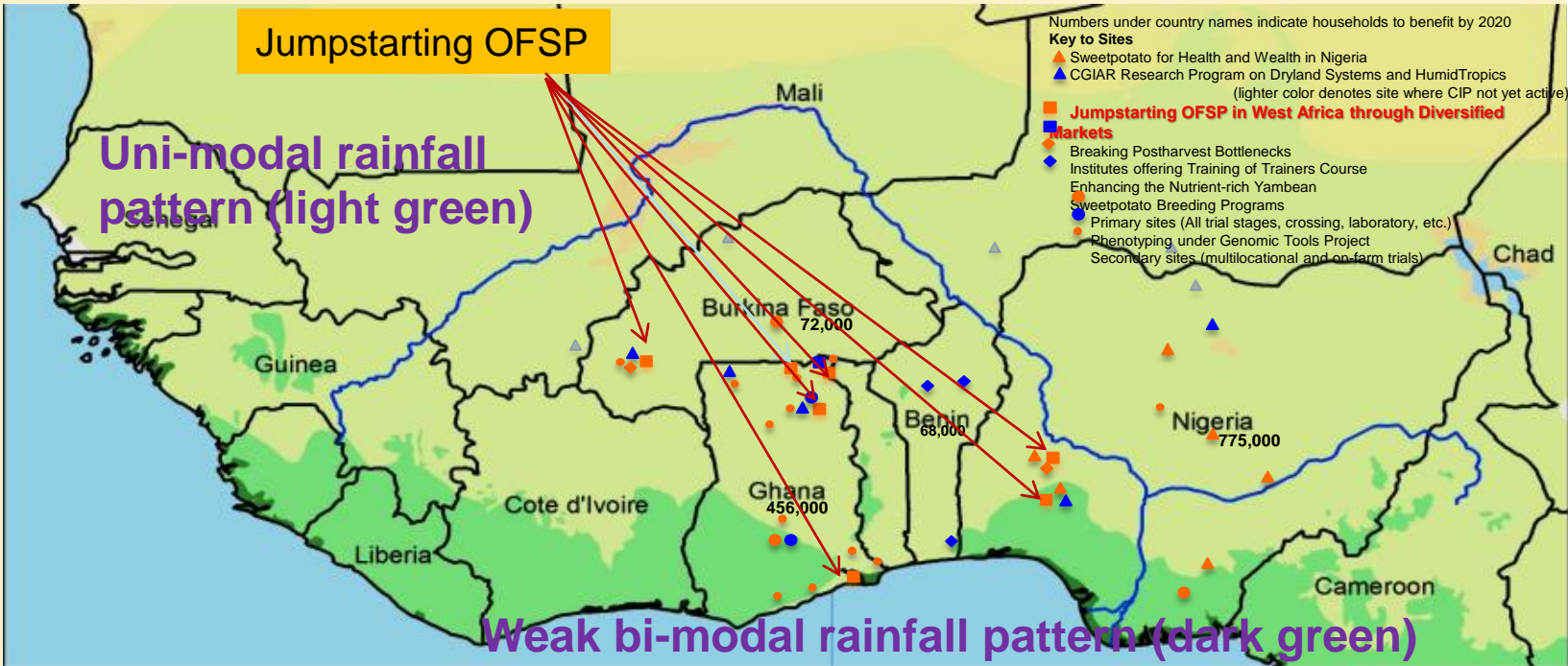
Outcome 4: (1) What is the impact of the Jumpstarting work outside their direct beneficiaries (e.g., neighbors or nearby communities)? (2) Which of the market models helped to increase incomes for OFSP producers?



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



Key NARS Partners Ghana: Council for Scientific and Industrial Research (CSIR)-Crops Research Institute, CSIR-Savanna Agricultural 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 Polytechnic, Bayero University Kano, Osun Elementary School Feeding and Health Programme
Key NGO Partners Agricultural Research Management Training Institute
 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 Halieutiques; **Benin:** Institut National de Recherches Agricoles du Benin
CGIAR and Other Regional Partners Ghana: IDE-Ghana, Association of Church Based Development Projects, Catholic Relief Service, Partnership for Child Development (PCD); **Burkina Faso:** IDE-Burkina Faso; **Benin:** Barnetofonden
 Alliance for a Green Revolution in Africa, CGIAR Research Program on Dryland Systems, CGIAR Research Program on Integrated Systems for the HumidTropics



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What are the specific market models of Jumpstarting OFSP? (2/1)



- Raising the importance of OFSP from an “orphan” crop to a priority crop in the three countries, and using actor-centered ToC exercises
- The project **focused on different market outlets** to stimulate OFSP nutrition value chains.
- In **Burkina Faso**, the focus was mainly on informal markets, with focus being on four urban fresh markets (Bobo, Ouagadougou, Dori, Kaya and Sikasso in Mali).

What are the specific market models of Jumpstarting OFSP? (2/2)



- In **Nigeria**, the O-Meals Homegrown School Feeding Program in the state of Osun was the main market outlet targeted.
- In **Ghana**, a mix of markets was targeted. The focus was on
 - ***local and urban informal markets*** (through urban fresh markets, and processed products, particularly baked products made using OFSP puree as a wheat flour substitute) and
 - **formal markets** (through community-based interventions with the Ghana Health Service and the Ghana School Feeding Program).

What is the cost of the pilot for each model? (1/2)



- Using cost-benefit analysis and by explicitly considering production/marketing benefits (here GM) and costs (fix costs not included), **we calculated return-on-investment (ROI)**, that is, **the production/marketing benefit per (dollar) spent**
- Case studies in the three countries showed that:

What is the cost of the pilot for each model? (2/2)



- across the board OFSP production and marketing were **profitable** contributing to success of overall efforts to create wealth and health. For example,

OFSP DVMs: For every \$1 invested, additional
\$1.82 returned in Ghana
\$1.10 returned in Nigeria
\$0.60 returned in Burkina



OFSP traders (per month): For every \$1 invested, additional
\$0.49 returned in Ghana
\$1.96 returned in Nigeria
\$0.84 returned in Burkina

OFSP production: For every \$1 invested, additional
\$2.99 returned in Ghana
\$2.13 returned in Nigeria
\$0.63 returned in Burkina

What are the critical factors in producers' decisions to adopt or not adopt OFSP under different agro-ecological settings and different market conditions?



- **Information. Potential OFSP adoption rate was up to 51%** in 2016, instead of the observed sample adoption rate of 42% if the whole population were exposed to the OFSP varieties.
- Another major factor influencing producers' decisions to adopt OFSP was related to **existence of market**.
- Furthermore, it was related to
 - the availability of planting material of varieties that were productive
 - Access to trainings on (OF)SP production management
 - Interaction with (public/NGOs/project) extension agents
 - Variety attributes

Does improved knowledge lead to increased consumption of OFSP? (1/2)



Improved knowledge appears to lead to increased consumption of OFSP.

- Endline results showed **knowledge led to adoption** of OFSP, and in particular cases, such as **households** with children under 5 (which had received nutrition messages) **improved dietary diversity**.

Does improved knowledge lead to increased consumption of OFSP? (2/2)



Improved knowledge appears to lead to increased consumption of OFSP.

- School-feeding programs where students receive OFSP meals clearly lead to increased consumption of OFSP.
- The result of a GHS willingness-to-pay survey showed that 15–16% of respondents from women beneficiaries returned to the farmers to buy vines and storage roots

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Lessons learned from pilot market-led value chains in West Africa (Jumpstarting Project)



JOFSF generated the following lessons learned for the market-led pilot implementation.

Lessons learned from pilot market-led value chains in West Africa (Jumpstarting Project)



- **Outcome 1.** Formal and informal diversified OFSP market opportunities developed in pilot areas in Ghana, Nigeria, and Burkina Faso



- **Adopting market-led approach is crucial in promoting OFSP value chains.** Evidence showed that farmers will respond to demand where there are markets

Lessons learned from pilot market-led value chains in West Africa (Jumpstarting Project)



- **Outcome 2.** Viable QDPM seed systems in target areas capable of expansion in response to increased demand.

Creating and Intensifying awareness campaigns about OFSP. Improving SP farmers' access to knowledge about OFSP varieties and their benefits would play significant role in their adoption.

Potential OFSP adoption rates were up to 61% in Ghana and 42% in Nigeria in 2016, instead of the observed sample adoption rate of 51% and 33% if the whole population were exposed to the OFSP varieties. This suggests that there is potential for increasing dissemination rate among population.



Lessons learned from pilot market-led value chains in West Africa (Jumpstarting Project)



- **Improving access to OFSP planting material. *Another important constraint to the adoption of OFSP was the availability of OFSP planting material.*** SP farmers sourced their planting materials from own farms, including the actual OFSP adopters.

The observations in the fields were that even the OFSP producers just buy part of OFSP vines they need, and produce the remaining by themselves.

In fact, one of the good sides of the JS project is its market driven approach where even vines have to be purchased which we know that sweetpotato producers were not used to at the beginning of the project.



Lessons learned from pilot market-led value chains in West Africa (Jumpstarting Project)



- **Recognizing the need for further institutional supports to significantly increase OFSP awareness and adoption rates** among communities, and therefore to spillover the positive and significant impacts of these actions on households' nutritional status. *In Ghana, with its diversified project activities, nutrition awareness and household impact on dietary diversity were higher than in Nigeria, where our efforts focused more on serving the school-feeding market.*



Lessons learned from pilot market-led value chains in West Africa (Jumpstarting Project)



- **Promoting OFSP varieties according to agroecologies.**
 - The agroecologies covered by project efforts ranged from the forest zone in Osun State (Nigeria), to savannahs (in Ghana and Burkina Faso).
 - A key difference between the forest and savannah agroecologies is the degree of virus pressure, with pressure typically being higher in the forest.
 - **So a “one size fit-all” variety cannot be a successful approach**

Lessons learned from pilot market-led value chains in West Africa (Jumpstarting Project)



- **Implementing best practices for both planting material and root producers.** Training DVMs as well as farmers on best practices will help improve the quality of delivered planting materials as well as storage roots for consumers, since management practices implemented in commercial seed systems are easily able produce adequate quantities of healthy planting material to meet demands. **The frequency, content, and type of trainings, as well as their relevance, are very important in influencing knowledge retention**



Lessons learned from pilot market-led value chains in West Africa (Jumpstarting Project)



- **Creating awareness of nutritional value of OFSP along with suitable methods.** Large-scale campaign to promote high quality planting materials and other OFSP-based products is crucial for product upgrading



Lessons learned from pilot market-led value chains in West Africa (Jumpstarting Project)



- **Increasing the adoption rate shouldn't be “one size fits all solution” approach, but should be country specific.**
 - The endline study showed that the OFSP adoption is influenced by a number of factors, which varied between the study countries.
 - For example, while **adoption propensity was higher among the Nigerian sweetpotato producers who had been trained** on sweetpotato production and management, it **was higher among the Ghanaian sweetpotato producers who had higher interactional visits with extension service agents.**

Lessons learned from pilot market-led value chains in West Africa (Jumpstarting Project)



- **Selling vines was a good strategy to increase incentive and promote a sustainable system.** Commercially oriented vine multiplication schemes are preferable because the profits they generate make them more sustainable.



Lessons learned from pilot market-led value chains in West Africa (Jumpstarting Project)



- **Having a well-organized system for vine multiplication (i.e., free-disease planting material, access to irrigation), transport, and delivery is critical.**
 - In Ghana, for example, **using trained decentralized vine multipliers (DVMs) and a voucher system** for accessing planting material **emerged as a success**

Lessons learned from pilot market-led value chains in West Africa (Jumpstarting Project)



- **Outcome 3.** Households, including women and children, in target areas increase consumption of vitamin A from OFSP.
 - **Developing comprehensive nutrition messaging towards wider OFSP consumption.** Comprehensive nutrition messaging including adult education approach and farmers' field school method, supporting with awareness campaigns, including radio programs; cooking demonstrations via community health **services is effective in facilitating larger OFSP consumption**

Lessons learned from pilot market-led value chains in West Africa (Jumpstarting Project)



- **Using appropriate means of delivery of the nutritional message.** Evidence generated from the behavioral study through school feeding program in Nigeria showed that the means of delivery of the nutritional message was very important (songs and posters were more effective than lectures). **So the precise type of information that motivates increased consumption, and the way it is delivered, is quite important.**



Lessons learned from pilot market-led value chains in West Africa (Jumpstarting Project)



- **Recognizing the potentials of formal markets such as School-feeding programs.** In Nigeria, under Jumpstarting, 41,000 pupils in 186 schools were receiving a weekly OFSP meal and that constituted the most important markets in that country



Lessons learned from pilot market-led value chains in West Africa (Jumpstarting Project)



- **Training processors intensively (technical and business skills).** Processors must be trained to meet the buyers' specifications in terms of product quality & consistency, and quantity



Lessons learned from pilot market-led value chains in West Africa (Jumpstarting Project)



The last but not the least

- **Engaging all the project members in the M&E activities.** All the members of an implementation team should engage in an informative monitoring and evaluation system, implying that they should have good skills in recording data, managing data, and reporting progress on project implementation

