ORANGE FLESHED SWEETPOTATO COMPACT -TECHNOLOGIES FOR AFRICAN AGRICULTURAL TRANSFORMATION (TAAT)

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THE AFRICAN CONTEXT

More than 160 million Africans are food insecure & malnourished

Over 32 million African children under 5 are underweight, with ~ 10 million severely so; 14.3 million wasted (with low weight for height)

Africa's recent economic gains are at risk if this continues

Low agricultural productivity & value addition are at the heart of the malnutrition, employment & income challenges in Africa

Agriculture accounts for 50-70% of employment in African countries but produces only 25% of Africa's GDP WHY TECHNOLOGIES HAVE NOT MOVED TO SCALE BEFORE IN AFRICA..

Productivity Gap

Weak linkages to the market

Insufficient attention to private sector value chains

Weak policy and regulatory environments

Insufficient effort to take existing technologies to farmers <u>at scale</u>

Limited Government investment in the Agriculture Sector

3

THE CONTEXT – GOING FORWARD

The Bank & its partners, therefore, seek to refocus the technically excellent but hitherto uncoordinated efforts of CGIAR and others & their network with NARES (represented by continental umbrella, FARA)

> Result will be a Regional Technologies Delivery Infrastructure (RIDI) with emphasis on agro-ecological zones & priority commodities that will reach 40-50% of African farmers with the most relevant food production technologies by 2025

BIG OPPORTUNITIES IN TAAT...

Embrace a new approach needed to scale technologies

- Cut back on unnecessary regulatory bottlenecks
- Fast track release of technologies across similar AEZs in one go

Help to open up the regional seed industry/markets & lead to

• Faster uptake of technologies

This is what TAAT will do through the Regional Technology Delivery Infrastructure (RTDI) of CGIAR centers & other technology providers, NARES, FARA & SROs

TAAT will work in concert with other initiatives to foster deployment of commercially viable technologies with improved access to markets/other enablers

5

SUSTAINABILITY OF TAAT WILL BE ACHIEVED THROUGH







Stronger linkages of farmers to markets Focus on agricultural value chains to ensure that demand & supply sides are integrated



Supportive policy & regulatory environments



Expected higher commitment of governments to agriculture in the focal countries

THE TAAT GOALS & OUTCOMES

TAAT PROGRAM COMPONENTS

- The creation of an enabling environment for deployment and adoption of food production technology by farmers
- Regional Technology Delivery Infrastructure (RTDI) – provision and deployment of needed food production technologies
- 1. Deployment of appropriate food production technologies, through crop/livestock campaigns in RMC

TAAT PROGRAM BENEFITS

via increased food security and income,
raising farmer's household incomes by
an average of US\$600 per annum,
reaching an estimated 11.7 million
households, representing on average 40
million people, over ten years, and
reducing by as much as a third the total
number of hungry people on the
continent.

- ii. TAAT will add an estimated 120 million MT of food to Africa's food production valued at US\$1.71 to US\$2.8 billion (Table 2). The increased food production will also have an effect on food prices, reducing the amount households spend on food, and further increasing access to more food, in a positive feedback loop.
- iii. TAAT is expected to add 3.15 million direct farm jobs over eight years.

THE FOCUS

The 9 Priorities Value Chains for Food Production Technologies

The 9 Technologies

- i. Water Efficient Maize for Africa (WEMA),
- ii. Import-quality rice for the West African lowlands,
- iii. Cassava for industrial use,
- iv. Small livestock (goats and sheep),
- v. Sorghum/millet for the Sahel,
- vi. Aquaculture
- vii. High yielding wheat varieties

viii.Orange fleshed Vitamin A rich sweet potato varieties

ix. High iron beans varieties for Africa

AREAS OF PLAY FOR THESE TECHNOLOGIES

Across the 9 Agricultural Commodity Chains



The Deployment & Execution of the 9 Food Production Technologies cuts across these 5 Commodity Chains

OFSP COMPACT OBJECTIVES



The compact will strengthen sector-wide human and institutional capacity to integrate OFSP into African Food Systems and Markets for increased incomes.

• The compact will pursue three specific objectives:

- Objective 1: Increased productivity and production of OFSP among smallholder and large-scale farmers
- Objective 2: Improved incomes from roots and processed OFSP based products along the value chain
- Objective 3: Create awareness about the nutritional benefits and the availability of OFSP fresh roots and processed products

OFSP VALUE PROPOSITION ALONG THE VALUE CHAIN

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Values in US Dollars	Vine	Root
	Multipliers	Producers
Price per kg sold (US \$)	0.56	0.10
Total cost per ha (US \$)	877.15	190.49
Total Revenue per ha (US \$)	2476.55	760.77
Gross margin per ha (US \$)	1599.40	570.28
Return on investment (%)	182%	299 %

Average per month	Aggregators	Retailers
Price per kg sold (US \$)	0.12	0.36
Total cost per month (US \$)	40.45	37.30
Total cost per bag (US \$)	1.30	6.63
Marketing margin per bag (US \$)	1.39	11.57
Marketing margin per month (US \$)	43.40	65.10
Return on investment (%)	107%	175%

In Rwanda OFSP roots are sold at 25% premium over white and yellow fleshed sweetpotato



- 1. Lack of quality vines
- 2. Poor Agronomic practices
- 3. Poor Storage
- 4. Little processing
 - technology adoption
- 5. Lack of awareness



Source: 2016 field survey for Jumpstarting OFSP Project; In each country, 5 DVMs, ten root producers, 5 aggregators, & 5 traders participated. Northern and Upper East regions in Ghana



EXAMPLES OF WHAT HAS BEEN ACHIEVED IN DIFFERENT COUNTRIES



• CIP and partners have scaled OFSP to 4.3 million households in SSA in the last 5 years

Rwanda 2016/2017

- Reached **210,000 beneficiaries** with OFSP vines, agronomic, and nutrition trainings
- Urwibutso enterprises sold processed products worth US \$200,000 and bought OFSP from 400 households
- Small scale seed multipliers (DVMs) sold OFSP vines (seeds) worth US \$ 241,114

Kenya 2017

- OFSP puree processor Organi buys roots from 400 farmers
- OFSP puree sold to Tuskys supermarket worth US \$ 36,624 to make bread
- Tuskys supermarket then made OFSP based bread worth US \$ 136,400



PROPOSED COUNTRIES OF INTERVENTION



Reach per country:

- 2 large, 5 small scale processors
- 10 vine multipliers
- 200 farmers linked to the value chain
- 40,000 farmers and
- 100,000 consumers

TECHNOLOGIES TOOLKIT



We will provide households and farmers with Orange Fleshed sweetpotato that are rich in vitamin A in each country

Technology Key Traits:

- High in Vitamin A
- High yielding most of the varieties yield above 25 T/Ha and can get up to 40 T/Ha compared to the farmers varieties that yield 3 7 T/Ha
- Early maturing between 3 4.5 months compared to farmers varieties that mature between 5 7 months
- Some varieties are drought tolerant
- Moderate to high sweetpotato virus tolerant
- Silage technology for animal feed







BEST PRACTICES TO ACCOMPANY THE TECHNOLOGIES

Associated technology package

- Building OFSP Seed System within each country to ensure high quality seed
- Good agronomic practices
- Vines conservation to ensure material lasts longer in the farmers field
- Nutrition trainings for food diversity pull mechanism for adoption
- Household and processor level trainings of product development and marketing
- Post-harvest handling in harvesting and storage
- Linking producers to the market processors, restaurants and wet markets







Through these activities we have witnessed yields increasing by 100 -200%



Promoting Diversified Use:

Gender-Aware OFSP Product Value Chains



Building the Orange Brand: Radio programs and market advertising to increase awareness of Vitamin A rich foods & increase demand

COMPRAMOS







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ENABLING ENVIRONMENT



- Work with the governments to have well defined seed law that recognizes the certified seed and quality declared planting materials
- Work with the government and NARES for seed multipliers to access OFSP basic seed
- Work with the National Bureaus of Standards to recognize sweetpotato puree as an ingredients for different products (Bread, Cakes, Biscuits, Ketchup, spaghetti, Yoghurts, Ice-cream, Juice, etc
- Work with the governments to ensure that sweetpotato (OFSP) is part of their priority crops in particularly for nutrition and incomes

VISION FOR SUCCESS IN THE 1ST YEAR

The vision of this OFSP TAAT COMPACT is a highly diversified OFSP sector that delivers nutritious food to rural and urban populations, especially the poor, and provides enterprise opportunities for young people and women.

- We will deliver at least 2 new varieties in each country.
- Improve average yields from 3-5 t/ha to at least 10 t/ha among the beneficiaries (minimum 100% increase in yields)
- At least two private businesses having access to the appropriate technical services that enables them to either produce OFSP puree or finished nutritious OFSP products for the market
- Each processor is selling at least two economically viable OFSP products in the market in each country with sales of at least US \$ 20,000 sale value per year by the end of the project
- Each private sector processor will be linked to at least 40 small holder farmers for roots supplies
- Increase in 50,000 new jobs and 50% will be women and youth
- 30% increase in incomes by beneficiaries
- Increased awareness by the public in the targeted market of the need for vitamin A and that OFSP is an excellent source of vitamin A in their diets

MONITORING LEARNING EVALUATION (MLE)

- I. Gender: all relevant data will be disaggregated by sex to allow monitoring of differential outcomes for women and men.
- CIP's uses tablet-based tools to collect geospatial data in standard M&E tools and methods. GIS components of the M&E plan to capture key data on locations of farmers, multiplication sites, fields, and markets and to monitor movement and spread of OFSP. ODK, E-SOKO
- 3. We will create a sweetpotato tracker that will host all seed and roots tracker and display modules that shows the indicators tracked
- 4. Learning: M&E data will be applied for learning and improvement of planning and implementation. CIP and partners will create a stakeholder platform and hold regular review meetings to monitor and discuss progress – every trimester at site level and annually at national level.
- Reporting: We will adopt the BNFP system with some customization that will be used to submit data, updates, technical, and financial reports and any other information in formats and frequencies as will be agreed.

WAY FORWARD

- This is not a traditional project that builds everything but of partnership of already going projects and partners
- Discussions with country TAAT leaders to finalize country action plans
- Launch of the TAAT project in each country with a planning meeting with all partners
- Cementing the partnerships in each country (this is not a CIP project but a partnership)
- We need quick wins to ensure that we have something to deliver before November 2018
- We will quickly set up an online MLE system that will be used by all project partners

OFSP for health and wealth for Africa is through











Thanks for your attention!











Thank you Merci Gracious Asante Murakoze