# Orange Fleshed Sweet Potatoes in tackling 'hidden hunger in Sierra Leone



NATIONAL

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## What this program is about?

- To contribute to increased intake of Vitamin A
- Food-based approach that is more sustainable in the long term than VAS programs
  - improve the dietary diversity among 1000 days households
  - Strengthen household food security
  - creating income generating opportunities for farmers groups
  - develop and facilitate access to improved varieties
  - establish linkages for planting materials between SLARI, demonstration farmers and FBOs
  - increasing utilization of OFSP and its value-added produce

### **OFSP Programmatic strategy**

Variety Development Community Ownership Supply chain management SBCC strategy **Capacity Building** Monitoring /evaluation and coordination of activities **Gender Integration** 



All 3 varieties out-perform farmers' varieties in terms of storage root yield, taste, cooking qualities, however, Mathuthu is being released.

## **Current approach**

 Increase vines supply and production of OFSP

Availability

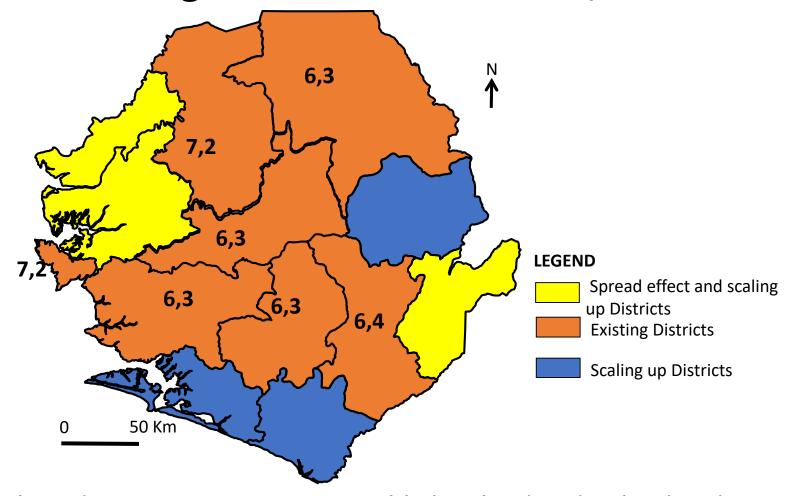
 Increase consumption of OFSP and pumpkin by children 6-23 months of age



Processing and product development

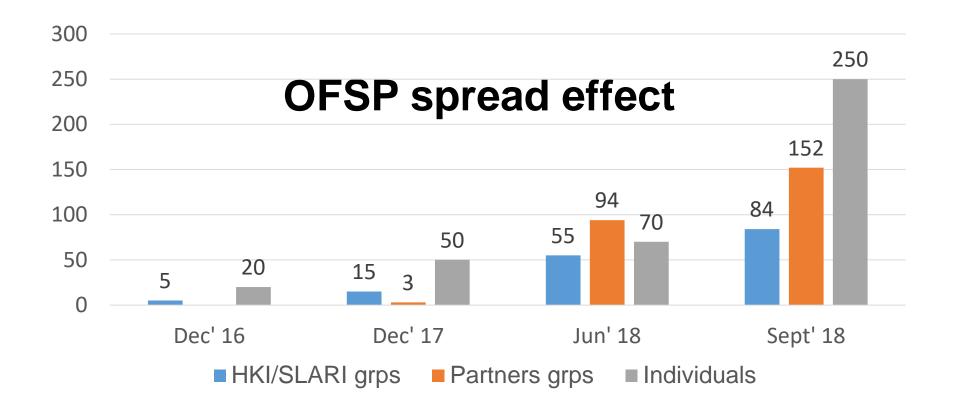


#### OFSP coverage in Sierra Leone 2018, '19



Selection is based upon commitment, suitable low land and upland and Functioning groups

Total existing groups is 64 (44 FBOs, 20 MSGs) plus 20 from the pilot study



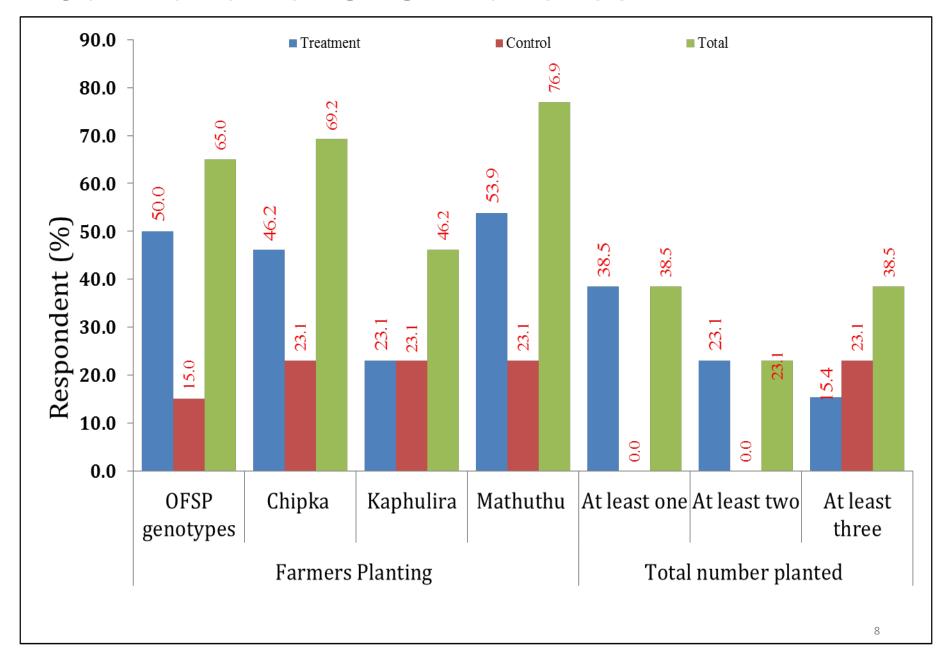
Karena CO =1000 cuttings large scale multiplication
John Benjamin= Kailahun 40 bags 2000 cuttings
Commercial farmers in Yele= 30 bags
DMO Bombali = multiplier for his community
Conservation Alliance Organization ~ 1 acre of vines multiplication
MAFFS multiplication plots in all 7 districts
WFP-Pujehun?
BRAC-2000 cuttings

6

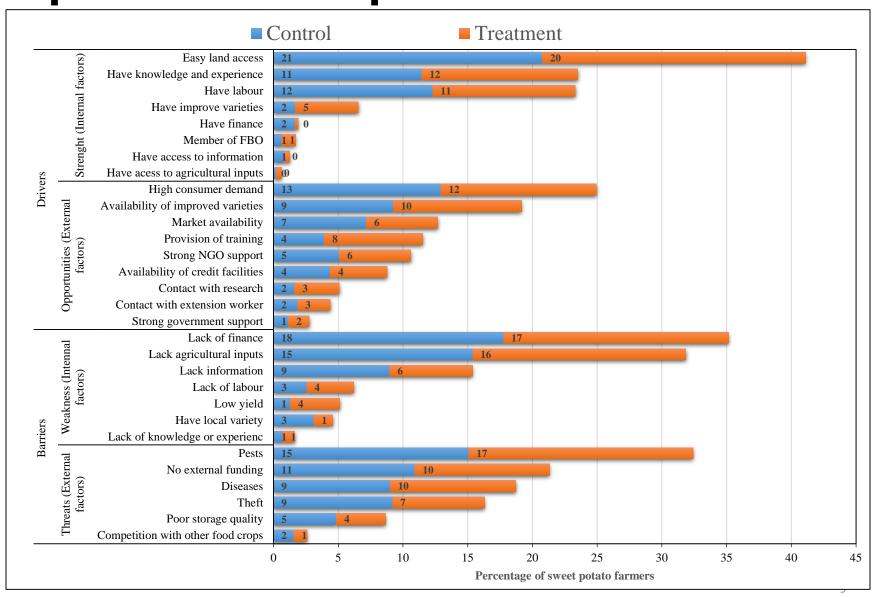
#### **District Partners** [Groups] Action Against Hunger (AAH) [11] Moyamba World Vision [50], Concern Mothers[3], Community Bo Empowerment and Development Agency (CEDA) [3] Rofulta Development Association (RODA) [2], Mankind **Activity for Development Activity Accreditation** Tonkolili Movement (MADAM) [2], FreshSalone [22], JAM [half acre multiplication site] Inter Aide, Cooperazione Internazionale (COOPI) (1,240 **Bombali** include Port Loko and Kambia Catholic Relief Service (CRS) [targeting 309 schools for Koinadugu school feeding program] AAH [3] Conservation Alliance [1 acre multiplication **WRA** site]

- 1. Direct beneficiaries = **1,544 (M=**606, F=938)
- 2. Indirect beneficiaries= **4,869 (M=** 1,899, F= 2,970

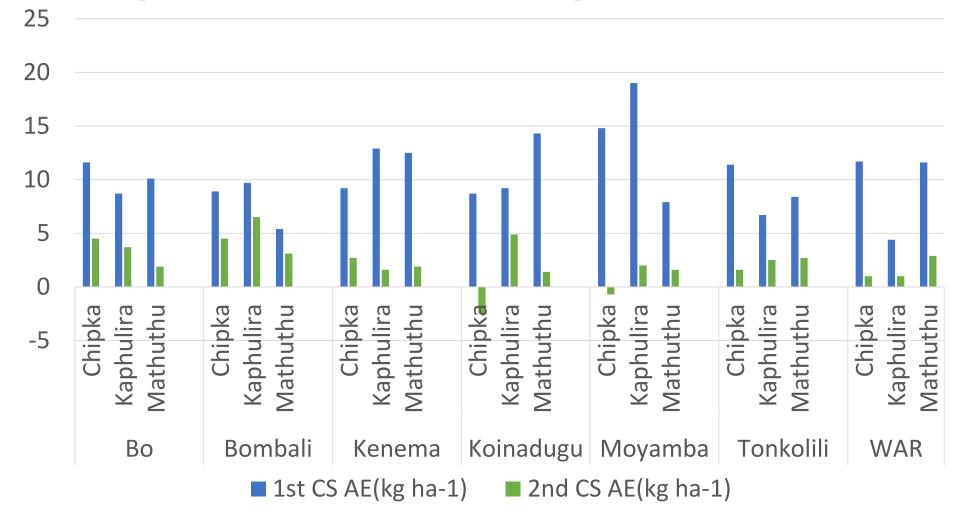
#### **Cultivation of OFSP varieties**



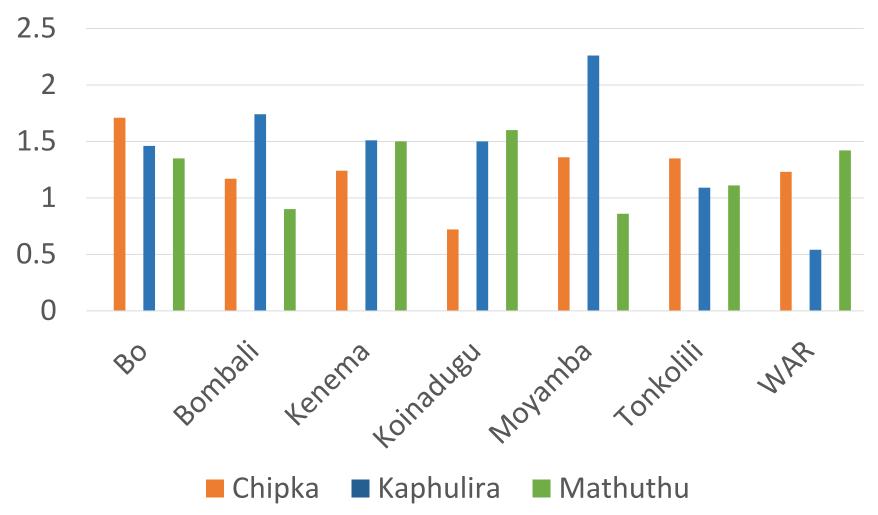
# Drivers and barriers to adoption of improved sweet potato varieties



# Agronomic efficiency (AE) of fertilizer during 1st &2nd cropping season (CS)

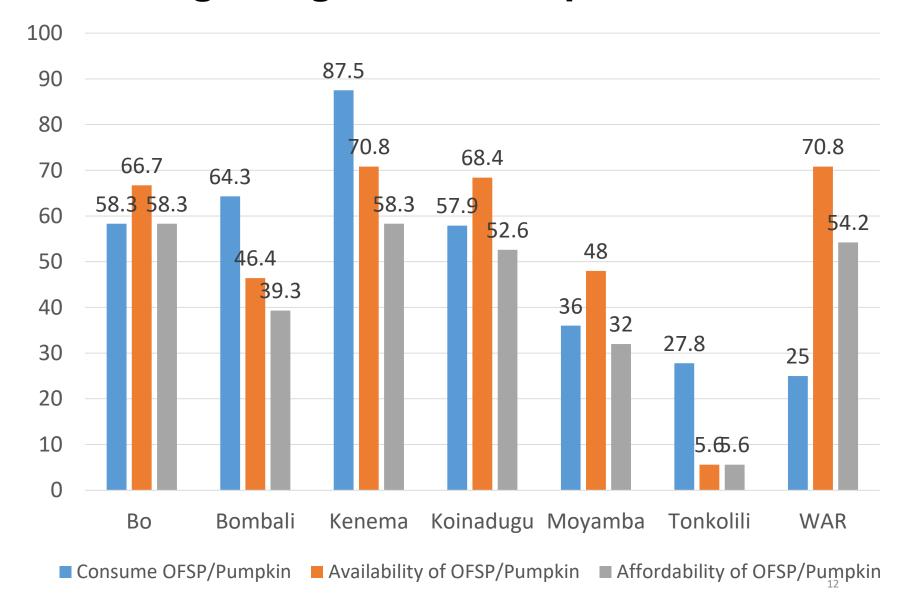


## Economic efficiency of applying fertilizer



An average 32% boost to yields by the application of fertilizer (NPK 15:15:15 fertilizer at 270 kg/ha one month after planting)

# Consumption, Availability and Affordability of OFSP among caregivers in sampled communities



# Farmers' knowledge acquisition

Responses from farmers	Overall %
Knew they were to harvest 3 months	
after planting	89.8
Knew IVS should be used for vine	
maintenance during the dry season	83.3
Employed new methods of Value	
Addition after training by HKI	<mark>11.1</mark>
Prepare OFSP to sell	24.1
Knew 10-15 best agronomic practices	
for OFSP	50.9
Knew 2-7 best practices on IVS	33.3

Value addition training to 168 farmers' group representatives across 7 districts





# **Plot Layout Plan for OFSP**



Established plot, showing ridges and planting

## Promotion of pumpkin production



#### **Demand Creation via AYV TV and PICO Video**

 Filming of best practices and messages of OFSP nutritional benefits were developed into a 2-3 minutes Pico-video and can be found on <a href="https://youtu.be/uaNdh0mvll">https://youtu.be/uaNdh0mvll</a>

## **Children eating OFSP at clinic**



### Pregnant woman and child eating boiled OFSP



#### **Challenges**

- Less rains leading to decrease in yield of all 3 varieties and districts compared to first cropping season.
- Incidence of the Stem Rot Disease in Kaphulira and Chipka across all districts except Koinadugu BUT tubers harvested were still excellent
- Theft of vines from one master farmers and half of the plot in Levuma Beach, WRA
- Less cooperation from some of farmers with respect to subsequent weeding of the plots after fertilizer application
- Complete destruction of plots in Talia, Kenema by goats
- Availability: poor irrigation, drought, seasonality of production

#### **Challenges**



Stem Rot Disease observed in almost all of the Districts esp. in Kaphulira

# **Challenges**



Weeds overcoming OFSP plot in WRA

### Vine Multiplication Site in Torwama, Bo



### Vine Multiplication Site in Sumbuya, Bo





### **Lessons learned**

- Timely planning and implementation
- Importance of partnerships
- Investment in capacity development



- Supportive supervision and monitoring is essential for course direction of programs especially during the dry season
- Technical support and collaboration with partners







