STRENGTHENING SWEETPOTATO SEED & ROOT ENTREPRISES IN THE SOUTHERN HIGHLANDS OF TANZANIA

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Introduction

• Tanzania - 2nd largest sweetpotato producer in Africa after Nigeria (FAO, 2015)

• Total tonnage in 2014 was about 3.5 million tons

• Total production area was 736,000 hectares

• National yield at 4.8 t/ha vs African mean (11.2 t/ha)

• Annual per capita consumption - 71.3 kg (2015)
Areas of VISTA-Tanzania Project intervention

- Seven districts in USAID-FtF zone of influence
- Two in eastern agro-ecological zone
- Five in southern highland zone
- Maize is a major staple
- Sweetpotato is consumed mainly as a breakfast and as snack
Coverage of VISTA-Tanzania
# VISTA-Tz Project Objectives 1 & 3

<table>
<thead>
<tr>
<th>Objective</th>
<th>Output</th>
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<tbody>
<tr>
<td>To increase production and consumption of nutritious OFSP varieties</td>
<td>Sustainable seed and root enterprises established and linked to quality pre-basic sources, SP farmers, community groups and root markets</td>
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<td>through an integrated agriculture-nutrition technology set</td>
<td>Farmers grow OFSP and realize increased productivity by accessing quality planting material &amp; applying improved farm practices</td>
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<td></td>
<td>Technologies for improved storage and marketing practices of fresh roots disseminated</td>
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<td></td>
<td>Selected fresh OFSP root market chains strengthened to benefit smallholder and medium-scale farmers</td>
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<td>To enhance capacity of sweetpotato producers and traders to utilize</td>
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<tr>
<td>improved storage and marketing of fresh OFSP roots</td>
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Key targets that had to be achieved to realize project objectives

- Built reliable and sustainable sources of quality planting material
- Mobilize, train and support actors to produce quality seed
- Get sweetpotato seed closer to most farmers
- Deliver 6,300,000 vine cuttings to target beneficiaries
- Reach 21,000 HH (direct beneficiaries) and 100,000 indirectly
- Test and adapt technologies for mass vine production
- Test and promote technologies for fresh root storage
- Understand sweetpotato market dynamics in target area
Position of OFSP in 2015 intervention districts

<table>
<thead>
<tr>
<th>Variable</th>
<th>SOUTHERN HIGHLAND ZONE</th>
<th>EASTERN</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Iringa</td>
<td>Mufindi</td>
</tr>
<tr>
<td>Interviewed (N)</td>
<td>65</td>
<td>55</td>
</tr>
<tr>
<td>Growing SP (n)</td>
<td>16</td>
<td>21</td>
</tr>
<tr>
<td>Growing SP (%)</td>
<td>24.6</td>
<td>38.2</td>
</tr>
<tr>
<td>White-fleshed (%)</td>
<td>68.8</td>
<td>57.1</td>
</tr>
<tr>
<td>Yellow-fleshed (%)</td>
<td>31.3</td>
<td>38.1</td>
</tr>
<tr>
<td>Orange-fleshed (%)</td>
<td>0</td>
<td>4.8 (1)</td>
</tr>
</tbody>
</table>

- About 50% of the farmers grew sweetpotato in 2015
- The majority grew white flesh varieties
- Only one district in SHZ one farmer that had grown OFSP
- Overall, only three farmers had grown OFSP in 2015
Sweetpotato by variety types in the market - 2016

Less than 10% of dealers ever sold OFSP

None in Iringa region had sold OFSP

Most dealers and consumers did not know nutritive value of OFSP

Source: Rapid Market Assessment
N=328
Sources of SP planting material - 2015

- Most sweetpotato farmers get planting materials for free or own farm
- However, about 30% buy SP planting material
- DVM’s existed before intervention
- Trained DVM had a small role in seed supply
**Pathway to building SRE**

**Step 1**
- Breeder’s seed
- Kibaha SRI

**Step 2**
- Primary bulking site
- Kibaha SRI
- ARI Uyole

**Step 3**
- Secondary bulking site
  - Morogoro
  - Katrina
  - Seatondale
  - Mbimba
  - Seatondale
  - Uyole

**Step 4**
- Tertiary bulking site
  - Farmer group-based district level vine conservation and bulking
  - Large seed and root entrepreneurs

2014  2015-17  2016-17  2017
Implementing the SRE development strategy

<table>
<thead>
<tr>
<th>Variable</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Districts</td>
<td>7</td>
</tr>
<tr>
<td>Villages</td>
<td>170</td>
</tr>
<tr>
<td>Farmer Groups with DVM</td>
<td>54</td>
</tr>
<tr>
<td>Number of net tunnels</td>
<td>108</td>
</tr>
<tr>
<td>SRE farmers</td>
<td>30</td>
</tr>
<tr>
<td>SRE Net tunnels</td>
<td>60</td>
</tr>
</tbody>
</table>

Selection Criteria:

STORE (D)\VISTA\Project meetings\Presentations\Feb 2016\Selection criteria for SRE and DVM.pptx
Seed Entrepreneurs Capacity Development on Business Skills (SECaBS)

- Selected seed and root entrepreneurs (SREs) were capacitated using (SECaBS) initiative
- Implemented by Farm Concern International (FCI) for the period of 1 year and 4 months (April, 2016 to August, 2017)
SECaBS trainings for SREs

• 4 training modules
  – Business planning
  – Enterprise viability/economic analysis
  – Financial access and
  – Supply chain coordination & management

• One-on-one in-field coaching sessions for SREs
  – Farmers fields and communities
  – Intended to evaluate SREs progress in implementing theoretical trainings into actual practice
Other SRE trainings

• Sweetpotato production agronomy
• Seed production planning (crop calendars)
• Disease management
Shift in project seed source

- **2015** - No seed from both DVM’s & public sources
- **2016** - Major source of seed is public institutions
- **2017** – Main seed source are DVM’s
Sweetpotato planting material and cash value

- Farmers account for ≈ 50% of seed value though starting operations later
- Sustainability will depend on demand for OSFP roots
- More farmers reduce use of home-saved seed or getting it for free
SRE sales to outside sources

- Total sales from Vines TZS 19,640,400- ($US 9,353)

- 1,019,920 vines cuttings sold
Success of SRE in selling sweetpotato planting material

Farmers who delayed to set vine bulking plots were not able to sell vines
Emerging lessons from this intervention

• OFSP still has low occurrence in the target districts

• SP seed systems still dominated by home saved seed

• The market for SP planting material is emerging

• Uptake for OFSP will depend on aggressive promotion and sustained supply of planting material – VISTA experience.

• More actors in seed system in SHZ enlisted than before and will need support and follow up to grow

• It is too early to make good conclusion on fresh OFSP roots since production is just picking up

• Success of this will depend on what we do after VISTA-Tz
ACKNOWLEDGEMENT

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