



RESEARCH  
PROGRAM ON  
Roots, Tubers  
and Bananas

# SCALING **SWEETPOTATO** TRIPLE S **PLUS**: gender responsive options for quality planting material, higher yields and extended shelf life for storage roots in **Ethiopia, Ghana**

TOM VAN MOURIK & MARGARET McEWAN, CIP-SSA, RTB, on behalf of the Triple S scaling team  
SPHI ANNUAL MEETING, 24 AUGUST 2019



# Why Triple S and what is it?

- Access to timely, quality and sufficient planting material key constraint to increase production in dry agro-ecologies
- Orange-fleshed sweetpotato is more difficult to store than white-fleshed SP (weevils, rot, shrinking)

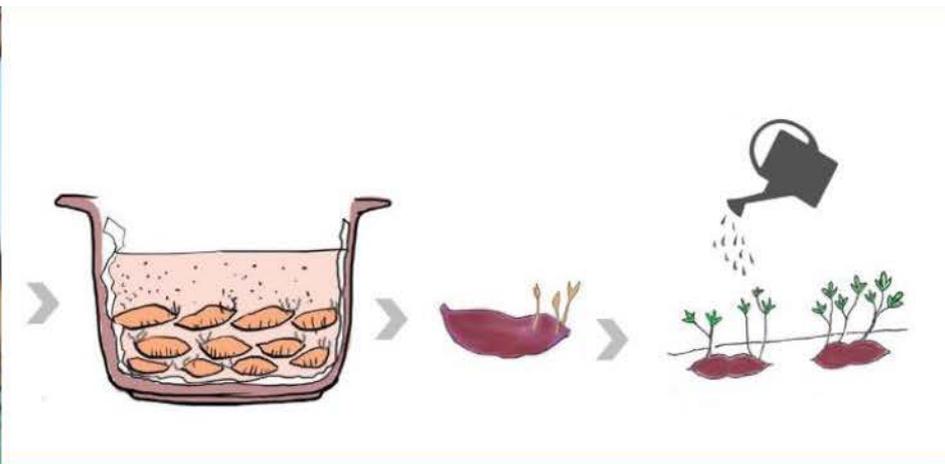


1. Identification and pegging of healthy plants

**Triple S:** *Storage in Sand and Sprouting* → store OFSP over the dry season and produce quality planting material for early planting at household level

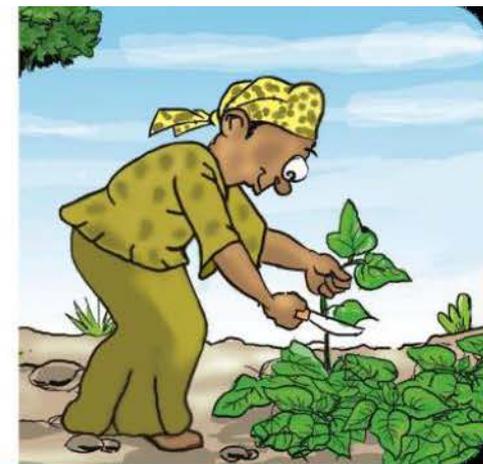


2. Roots stored in sand at start dry season



3. Roots sprout during dry season

4. Plant out roots in root bed & water



Sufficient quality planting material for early planting

# The big change anticipated?

- Smallholder farmers (especially women) maintain and quickly multiply their own, quality planting material
- Transform from vine-based, to root based seed system
- Increase yields, increase availability of roots for consumption and markets
- Improve nutrition, incomes and wellbeing of sweetpotato farming households



# Components and vision for impact

## complementary components and partnerships

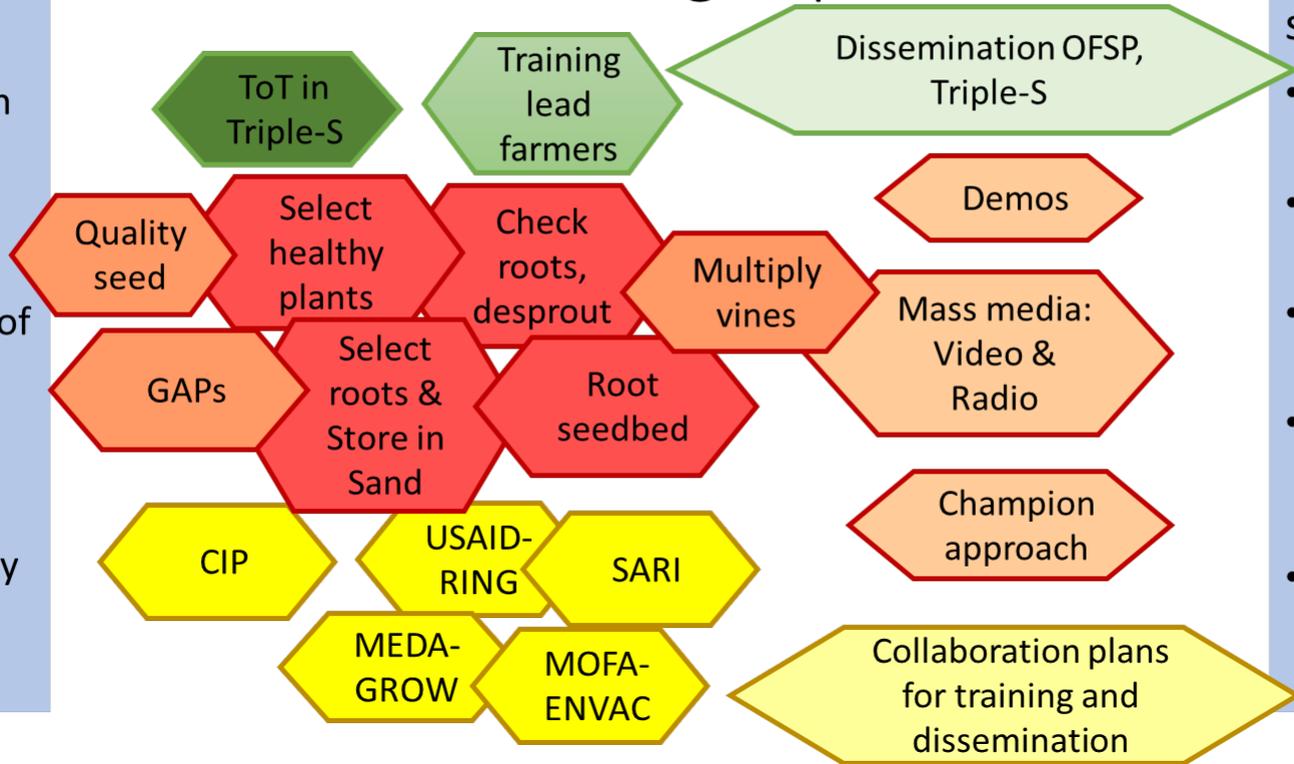
Vision developed with partners

Core components (red) complementary components (orange), Partners (yellow)

### Vision for unlocking the potential of OFSP in Northern Ghana using Triple-S +

**Current situation:**

- Malnutrition
- Untapped potential of OFSP
- Constraints of storage and planting material
- Need for sustainability of seed system

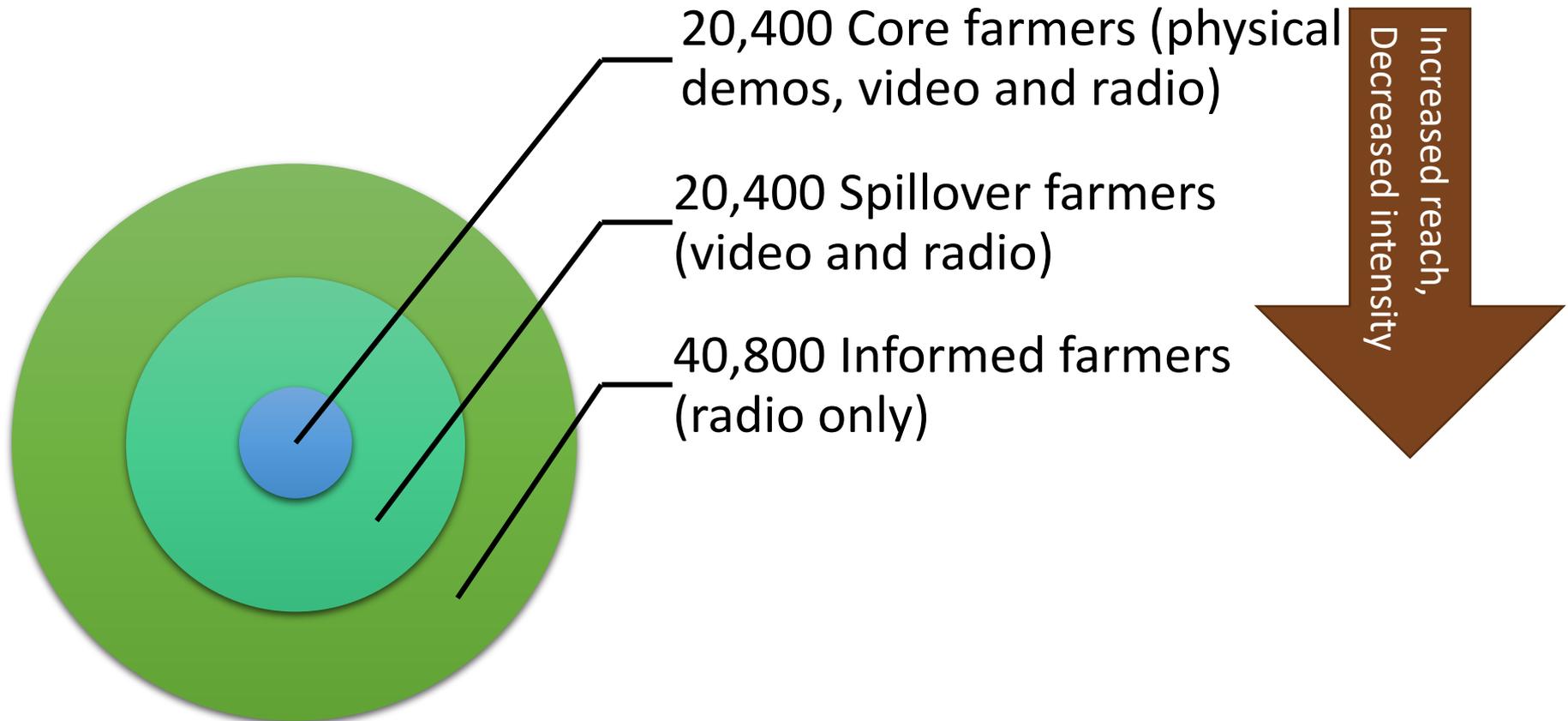


**Wanted situation:**

- Farmers store OFSP roots (>3m)
- Farmers maintain planting material
- OFSP root yields increase
- OFSP roots are available for longer periods
- Improved food & nutrition security

# Targets, exposure to multiple communication channels to reach scale

Reach 81,600 smallholder farmers (50% women) in three countries with the Triple-S PLUS technology (Ghana, Ethiopia and scale-up country) by Dec 2019



## Scaling partners & collaborators

Partner type	Ethiopia	Ghana
International NGOs, large projects	People in Need (PIN)	USAID-RING (Global communities), MEDA-GROW
Government projects	Digital Green, Video-based extension	MoFA-ENVAC, Modernizing Agriculture in Ghana (MAG)
Radios and journalists	Consultancy with radio journalists, linked to FM stations	Radio NorthStar, Savanna Radio, Radios Galki, Gmantambu, Radford Radio
Agricultural Training colleges	Sodo AGVET	Damongo Agricultural College
Government extension	BOARND (5 levels), Bureau of Health	Departments of agriculture (3 level)
Research	South Agricultural Research Institute	Savanna Agricultural Research Institute
Private sector		IWAD (seed company), Processors lightly involved
CBOs		Local NGOs (3)

Partners changed and diversity increased over time

# Key events from Triple S Scaling to date

2018, year 1

Start-up workshop RTB scaling fund in Nairobi (March)

Country Start-up workshops in Ghana and Ethiopia (Mar, Apr)

Vine distribution & start TOTs in Ghana & Ethiopia (Jun-Aug)

SPHI Deep dive session (Sept 2018)

Start of Step-down training, videos in local language (Oct-Nov 2018)

2019, Year 2

Annual regional meeting, learning journeys (Jan)

Continue video based extension and step-down (Jan-Aug)

Plan for vine multiplication / distribution (Mar-May 2019)

Vine distribution & sales, GAP demos (Jun-Aug)



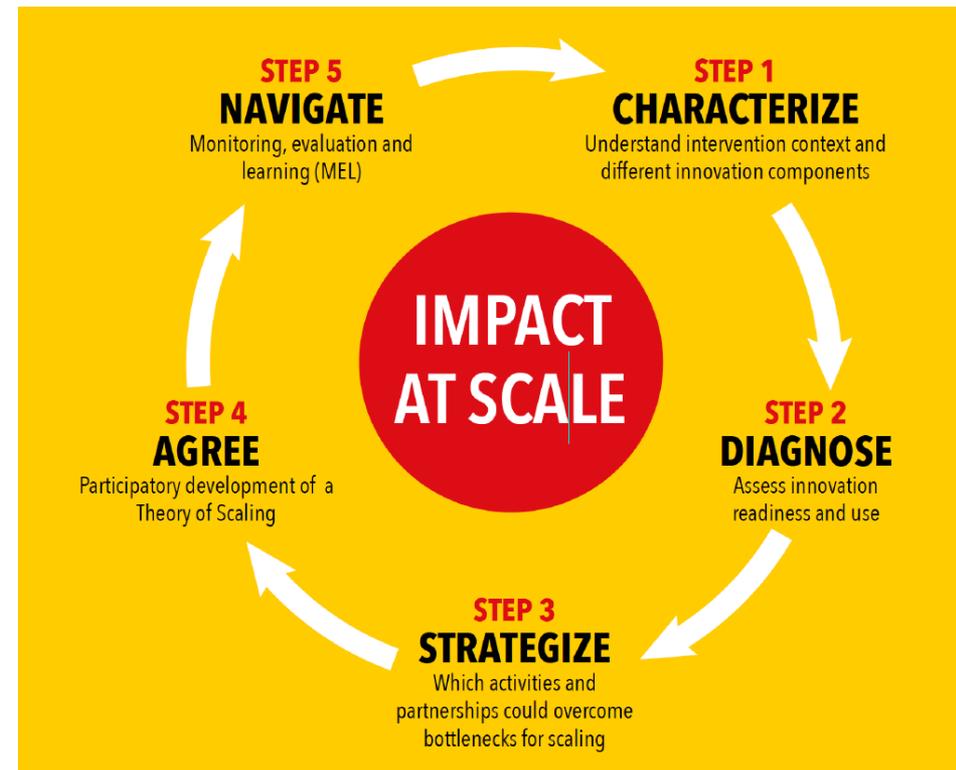
# Scaling readiness approach, scaling process

## Tools used for scaling process, RTB scaling fund

- Scaling readiness approach and assessment (5 steps),
- Online partner and stakeholder surveys

## Tools used by Triple S scaling project and partners

- Rich picture, vision for impact, learning journeys
- Partners' scaling capabilities assessment (6 domains)



# Communication & learning tools developed

## Farmer audience:

Direct demonstration, flipcharts, video based extension, radio, talking books



## Advocacy materials:

- Blogs, Infographic, Briefs,
- Online sources in SPHI, Use of social media among implementers Facebook, barcode link



# Achievements from Triple S Scaling to date

Reaching target audiences:

Ghana:

- 57,655 farmers (66.5% women) reached by video-based extension and step-down training
- Videos unleashed high demand for OFSP vine cuttings (7 million), need for private sector engagement
- >4,33 million vine cutting sold to >20,000 farmers, >80% women
- Radio programs popular with responsive audience (2544 call-ins, 17% women)

Ethiopia:

- 10,081 farmers (26% women) reached
- Targeted interventions (Healthy living club) more inclusive for women → (50%)



# Lessons & reflections on technical aspects of scaling Triple S PLUS

- SARI Ethiopia proposes roots (not vines) to disseminate new varieties, SARI (and CIP) Ghana, still to make this move
- Availability of roots for storage low (consumed sold or lost, before farmers were sensitized on Triple S)
- Triple S successfully applied by the few early users in Ghana in first year
- Narrow window (weeks around harvest) for starting Triple S, risk to lose a year (Ghana)
- Need more detailed cost-benefit analysis, compare Triple S / maintenance of vines / rapid multiplication
- Decentralized Vine Multipliers vs. large farms vs. root based system, quality and source of vines





## Lessons & reflections on process of scaling

### Concept of scaling approach:

- Scaling readiness as approach still needs adaptation and validation
- Needs guidelines for independent use by project teams

### Implementation of scaling with partners:

- Timelines / priorities among partners often don't align, needs long-term engagement
- Evolution of partners and partnerships, increasing diversity
- Videos and smart-projector kits highly appreciated by partners and farmers alike (high participation of women in Ghana)
- Appreciation of the synergy between technical and development partners (example: on-demand variety trials by local CBOs)
- Many opportunities for cross country learning (volumes of roots stored, engagement with agricultural colleges)
- Contracts and agreements major constraint, more flexibility required

## Spill-over and demand for Triple S in other countries

- Stakeholders in other countries request training and materials for OFSP and Triple S
- Need for flexible funding to validate Triple S in new countries/contexts to prepare for further scaling

Country	Organization	Training provided in-country	Triple S validated
Senegal	NCBA-CLUSA, Min.Agric.	Yes	no
Togo	GIZ ProSecAI	No, but consultant trained in Ghana	Yes
Burkina Faso	HKI, INERA	No, some staff previously exposed to Triple S	Yes
Cote d'Ivoire	CNRA	No	No



# Future perspectives, sustainability and exit strategy

## Remaining 4 months:

- Assess gender responsive approaches and tools (FGD)
- Continue to monitor dissemination and use of Triple S PLUS
- End-of project workshop for evaluation and learning from process
- Develop manuscript on partners capabilities for scaling and lessons from partnering

## Incorporation Triple S PLUS in curricula, workplans and policies:

- Used by Damongo Agricultural College, push for incorporation in national curriculum review workshop Aug 2019
- OFSP and Triple S in Department of Agriculture workplans and presidential agricultural initiative (PFJ)

## Engaging new partners for Triple S validation and/or further scaling

- AfDB funded TAAT OFSP compact → plans for further scaling in Ghana, Togo, Burkina Faso....

## Connect Triple S with value chain initiatives

- Create economic incentives for dry season root production for processors, also an opportunity for Triple S, link to aggregators and processors



RESEARCH  
PROGRAM ON  
Roots, Tubers  
and Bananas

**Acknowledgements**  
CIP, RTB, HKI, NRI, USAID, SASHA, EU

**Thank you**



Proposal development was undertaken as part of the CGIAR Research Program on Roots, Tubers and Bananas (RTB). Funding support for this was provided by: SASHA and USAID.