

World Vision's Experience on Seed System Development

Crop Adaptive Trials (CATs) & Seed Multiplication (SM)

**Greater Resilience Through Enhanced Agriculture and Nutrition (GREAN)
World Vision International, South Sudan**

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Outline

- ❑ **Overview**
- ❑ **Partners and Interventions**
- ❑ **Approach for Seed Multiplication**
- ❑ **Main Achievements**
- ❑ **Challenges and Lessons**

Overview

- ❖ Agriculture is key to accelerating growth, overcoming poverty and food security.
- ❖ Improving farmers' access to quality seed of preferred varieties is crucial for increasing agricultural productivity and production.
- ❖ WVSS in collaboration with the MAFS is working to strengthen the development of a vibrant and market-oriented seed sector through CATs and SM program.
- ❖ The function of this program (CATs) is to conduct multi-location trails, testing the suitability of newly developed varieties.

Main:

Ensure that smallholder farmers across the country have continued access to certified seed so that there are increased yields per unit area and improved food security and incomes.

Specific:

- ✓ Increase the choice of improved seed for farming community.
- ✓ Create demand driven seed supply system through engagement of private and public partnership
- ✓ Improve quality seed availability and access for the farming community
- ✓ Assist the government to scale up improved varieties for principle food crops in South Sudan.

Why Crop Adaptive Trials?

- ✓ It is a **simple, low cost** and **gives short term solution** for introduction and promotion of new varieties.
 - New variety release takes long time.
- ✓ Variety testing done with **full involvement of farming community**, which speedup the screening.
- ✓ It will **feed into the seed multiplication program**



Crop Adaptive Trials (On-Station)

Trial Site			Agro-ecological zone
(county)	State	Project	(NAPA 2016)
Gogrial East	Warrap	FORSITE (WV)	Western plains
Twic county	Warrap	FORSITE (WV/ NRC)	Western plains
Tonj North	Warrap	GREAN	Western plains
Jur river	Western Bahr El Ghazal	FORSITE (NRC)	Western plains
Cuiebet	Lakes	FORSITE (AVSI)	Western plains
Rejaf	CEQ	GREAN	Hills and mountains
Melut	Upper Nile	OFDA	Eastern flood plains
Fashoda	Upper Nile	USAID-FFP	Eastern flood plains

Crops types: Sorghum, Pearl millets and Sesame (16 entries)

Number of seasons: Minimum two (2 years)

Experimental data: Collected, analyzed and results interpreted

Farmer field days: Farmer's preference using participatory varietal selection

Partnership

- ❑ Strong partnership links and its advisory committee includes senior researchers (ICRISAT), researchers from MAFS, UoJ and representatives of Seed Trade Association (STASS)
- ❑ Organized annual seed review meetings before season starts
- ❑ Seconded 4 staff from the State MoA and MAFS research Dept.

Strategic Thinking



- ❑ Established one seed multiplication group per Payam (10 Payams, 5 Warrap & 5 Central Equatoria)
- ❑ Each group to cultivate **minimum 10 feddans** with their own choice of the crop
 - Ground nuts
 - Sorghum
- ❑ Site selected considering **isolation distant/ time** and accessible for **monitoring support**

Approach for Seed Multiplication

- ❑ **Training** producers groups (SM, post-harvest, storage and seed business)
- ❑ **Technical support** by partners e.g; CAD, MAFS – research Dept., UoJ and project team
- ❑ Provision of **seed**
- ❑ Establishment of the groups for **mobilizing saving & dev't of business plan.**
- ❑ **Seed storage construction** with cost sharing.
- ❑ Facilitating **market linkage.**

Main Achievements

Crop Adaptive Trials

- ✓ Six sorghum varieties released
- ✓ Four Pearl millets superior varieties are due for release
- ✓ Area coverage is expanding to new locations (Yambio and Polataka)
- ✓ New crop types added (Pigeon pea, finger millets and OFSP)/nutritious sensitive approach

Seed multiplication

- ✓ 250 farmers were trained on seed production and Seed marketing
- ✓ Four seed producers groups are linked to seed companies
- ✓ 20 saving group established and are supported with S4T/VSLA kits
- ✓ Each group constructed improved granary with cost sharing

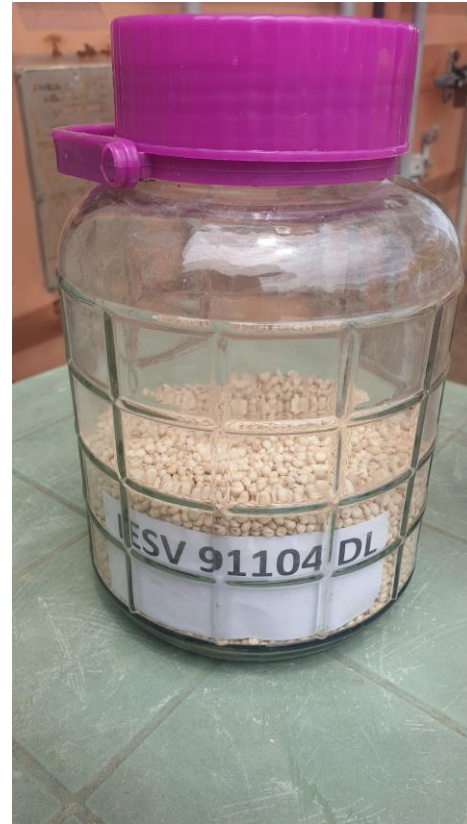
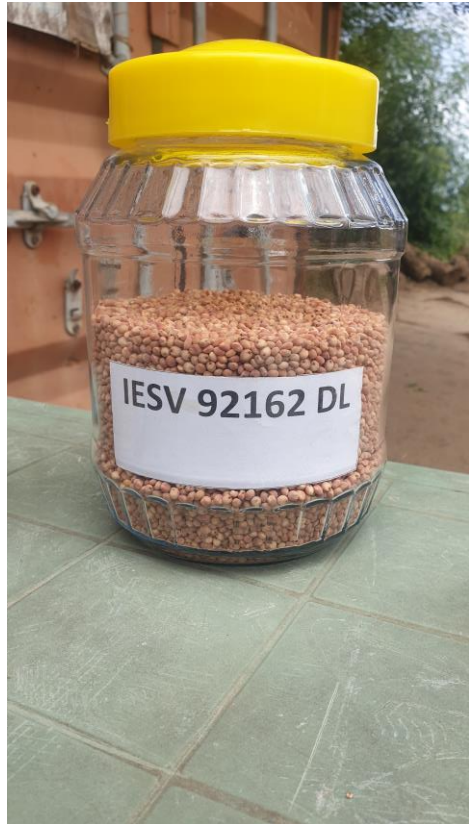
Challenges and lessons

- Most of the group **confirms the increase in production** and benefited from market linkage.
- Less attentive to **isolation distance/ time**.
- The seeds supplied by seed company need to be monitored.
- Flooding, unreliable rainfalls and drought spells.
- Difficult to implement this in far area. e.g. Lake State.

Routine field monitoring visit during the 2020 sorghum trial



Farmers participating in varietal selection at Tonj North, 2019



Officially Sorghum Varieties, May 2022



Seed Increase Program at Rejaf in 2021

**Pearl millet: Participatory variety
Selection at Tonj N., 2021**



**Sesame: Participatory variety
Selection at Tonj N., 2021**

A photograph of a sorghum field. The plants are tall and green, with large, upright panicles that are a mix of green and brown. The background shows a line of trees and a hill under a cloudy sky.

Thank you!
Questions/ Comments/
Suggestions