

National Variety Release Committee (NVRC) Released 2025

Meet SANGE SOYA 01

A New, Homegrown Soybean Variety for Tanzania

Based on an interview with **Dr. Ambonesigwe M. Mbwaga**, Managing Director of Sange Agro-Seed Company Ltd.

SANGE SOYA 01: At a Glance

3 t/ha

POTENTIAL YIELD

High-yielding even in harsh, erratic rainfall conditions.

35.9%

PROTEIN CONTENT

High-quality protein for nutrition and animal feed.

Large Seed

KEY FARMER TRAIT

Developed specifically to meet farmer demand.

Variety Profile & Origins

Developed over three years from 20,000 IITA soybean materials, SANGE SOYA 01 emerged from rigorous screening that narrowed down to three promising lines. Dr. Mbwaga selected this variety for its yield potential, close to three tons per hectare, its large seed size, and medium maturity, directly responding to farmer preferences. This progress was made possible through IITA's foundational support, both in providing high-quality genetic materials and offering catalytic financial backing during the early research phase. The variety performed surprisingly well during the harsh 2024/25 season, showing stability from Morogoro through the highland zones. Only minor rust appeared at the very end of the season without affecting yield.

| Official Status | Released 2025 by NVRC |
|-------------------|---|
| Oil Content | 20.8% |
| Protein Content | 35.9% |
| Resilience | Performed well in erratic rain conditions |
| Breeding Timeline | 3 years of screening from 20,000 IITA materials |

Agronomic Fit for Smallholders

SANGE SOYA 01 is designed for Tanzania's smallholder systems. Dr. Mbwaga notes that the variety is "not overly bushy," making it compatible with intercropping systems commonly practised in the Southern Highlands.

Recommended Practices

- Spacing: 10cm × 30cm
- Intercropping: Alternate two rows of maize with two rows of soybean
- Farmer Feedback: Trials in Mpumalanga, Mbeya, and Mbosi confirmed farmers prefer its large seed size and high yield.

Intercropping Model (2:2)

Recommended layout: alternate two rows of each crop



Repeat pattern across field

The Seed System: Success, Challenges & Lessons

Officially releasing a variety is just the first step. The journey to get SANGE SOYA 01 to farmers reveals the complex realities for local seed companies in Tanzania.

✓ Success Stories

- Official Release: SANGE SOYA 01 is now an officially released variety, a major milestone.
- Farmer Acceptance: On-farm trials show high farmer demand for the variety.
- **Initial Market Traction:** Around 2 tons of pre-basic seed produced, with nearly the entire quantity purchased by Real World, a TSSI partner. The TSSI model breaks the usual "research-station shelf-life" problem by involving private partners early, ensuring immediate uptake.
- IP Protection: Dr. Mbwaga has applied for formal Plant Breeders' Rights protection.

⚠ The Core Challenge: Systemic Bottlenecks

The biggest bottlenecks for private breeders are land for multiplication and market linkage.

Dr. Mbwaga explains: "Breeders and growers need predictable off-takers. Many times, farmers obtain seed, produce grain, and then face a dead end. Without a reliable buyer, the entire value chain collapses."

Case in Point: Dr. Mbwaga still has **5 tonnes of grain** in storage because the intended off-taker did not purchase. That grain can no longer be used as seed.

Tanzania also imports large quantities of soy-based animal feed from Zambia and Malawi because adequate processing infrastructure—especially extruders—is lacking locally.



Championing sustainable food systems

Key Lessons & Recommendations

- 1. Strengthen Market Linkages: Strengthening aggregation systems, processing infrastructure, and market linkages would dramatically shift the balance toward domestic production.
- 2. Invest in Processing Infrastructure: Tanzania needs local extruders to process soya for animal feed, reducing imports from Zambia and Malawi.
- 3. Support Local Seed Companies: Government support is critical. Models like BBT work well for youth, but similar financing mechanisms should be extended to small and medium seed companies.
- 4. Synchronize the Value Chain: Seed production, farmer mobilisation, and market linkage must be synchronised for impact.

The Future Vision for Sange Agro-Seed

Dr. Mbwaga is not stopping with SANGE SOYA 1. He is cleaning and stabilising another high-protein soybean line with 40% protein content that was initially mixed and not accepted during earlier trials. Once purified, he intends to submit it again for evaluation.

His goal is to leave behind at least two strong varieties in soybean, adding to his existing work on maize, cowpea, and sorghum. Sange Agro-Seed's core work is maize seed production, but soybean is a major strategic crop as part of a diversified portfolio that includes rice, sunflower, and sesame (ufuta).

Call to Action

Supporting homegrown innovators like Dr. Mbwaga with smart policy, infrastructure investment, and reliable market linkages is essential for Tanzania's agricultural transformation—and for achieving the TSSI project's target of 50,000 tons of soybean grain annually.

Sange Agro-Seed Portfolio



Based on an interview with Dr. Ambonesigwe M. Mbwaga, Managing Director of Sange Agro-Seed Company Ltd. Interview conducted by AGCOT Centre on November 19, 2025.

