

DTMA & WEMA Drought Tolerant Maize Varieties and Water Efficient Maize Varieties



Enhance farm's resilience with DTMA and WEMA maize varieties, ensuring consistent yields even in unpredictable weather.

These seed technologies, developed conventionally and biotechnologically, enhance maize resilience to soil dryness and water scarcity, outperforming traditional varieties across various water stress levels in both dry and intermittently wet climates.

This technology is **TAAT1 validated**.

8-8 Scaling readiness: idea maturity 8/9; level of use 8/9

Gender assessment **5**

Climate impact **7**

Problem

- Dependence on Rainfall:** Over 90% of African maize farming is rainfed, leaving crops vulnerable to unpredictable weather patterns.
- Yield Instability:** Conventional varieties are highly sensitive to water availability, leading to inconsistent yields.
- Crop Failure Risk:** Insufficient rainfall can result in complete crop loss, jeopardizing livelihoods.

Solution

- Enhanced Resilience:** DTMA and WEMA outperform conventional varieties under various water stress levels.
- Increased Productivity:** Adoption of these varieties leads to substantial increases in maize grain production.
- Improved Crop Resilience:** Crops become more robust, with heightened resistance to dry spells and low rainfall.

Key points to design your project

- Estimate seed quantity needed (0.8 to 1.2 USD per kg, 25 kg/ha).
- Factor in delivery costs, import duties (available in Kenya, Malawi, etc.).
- Arrange training and post-training support.
- Develop communication materials (flyers, videos, radio).
- Optimize with complementary techniques (e.g., IR maize, fertilizer blending).
- Collaborate with agricultural institutes and seed companies for implementation.

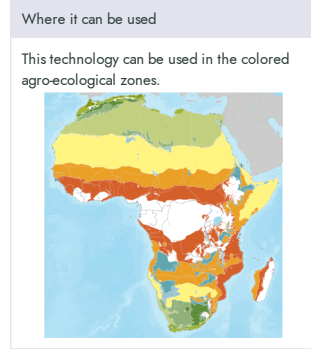
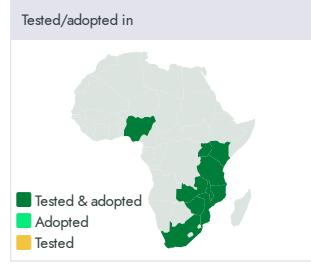
Cost: \$\$\$ 0.8—1.2 USD/kg	ROI: \$\$\$ 240 USD
Seed selling cost	Income per Ha
0.6 ton/Ha	20—30 %
Yield increase	Larger grain harvest than common type
	IP
	Unknown

Technology originally documented by
ProPAS

Commodities
Maize

Sustainable Development Goals

Categories
Production, Improved varieties, Disease resistance, Yield improvement



Target groups
Farmers

