

Stress Tolerant Maize for Africa

Led by the International Maize and Wheat Improvement Center (CIMMYT) and the International Institute of Tropical Agriculture (IITA)



More than 208 million households in sub-Saharan Africa (SSA) depend on maize for food security and economic wellbeing, but maize productivity in this region is the lowest among the world regions. The slow adoption of new maize varieties means that farmers are unable to reach their yield potential.

The Stress Tolerant Maize for Africa (STMA) project will develop new maize varieties with resistance to the many challenges faced by farmers, and support local seed companies to make this seed available at scale in SSA.

A key priority of STMA is to facilitate the replacement of varieties older than 15 years in Benin, Ethiopia, Ghana, Kenya, Mali, Nigeria, Tanzania and Uganda.

Why STMA?

STMA will work across 12 countries in sub-Saharan Africa. This area contains 78 percent of the total maize area in SSA, and is home to 176 million people who depend on maize-based agriculture for their food security and economic wellbeing.

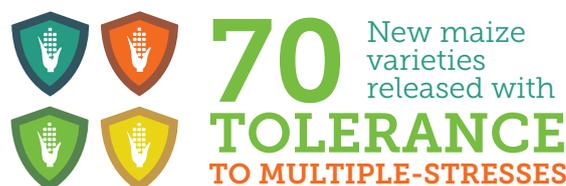
Nearly half of the maize area in SSA is planted to varieties that were released 15 or more years ago.

Without access to modern stress-tolerant varieties, farmers are vulnerable to drought, poor soil fertility, diseases, pests and weeds. This is complicated further by a lack of access to knowledge, affordable inputs and financial resources.

The improved maize varieties produced by STMA are expected to offer farmers facing these challenges up to 30 percent greater yields, while also combating malnutrition through increased quality protein and provitamin A content.

This will contribute to efforts to increase the food and income security of smallholder families in SSA who depend on maize as staple food.

Goals by 2020



Precedents

STMA builds on strong partnerships with the public and private sector formed during previous projects that achieved

major successes in African maize seed systems. These include the Drought Tolerant Maize for Africa (DTMA) and Improved Maize for African Soils (IMAS) projects, among others.

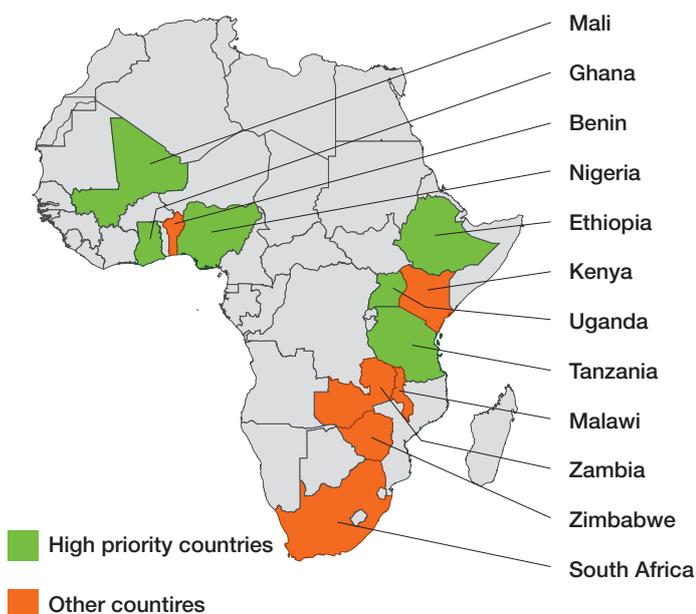
STMA benefits from the strong and continued support of the Bill & Melinda Gates Foundation and the United States Agency for International Development (USAID).



THE STMA approach

- Develop, adapt and utilize innovative breeding tools and techniques to increase the rate of improvement for multiple important traits.
- Support the commercialization of improved maize varieties with gender-preferred traits and multiple stress tolerance by the seed sector in SSA.
- Facilitate the availability and access to seed by farmers to improve uptake in target countries.
- Optimize the impact of investment through effective project oversight, monitoring and evaluation, and communication.

STMA Countries



STMA TARGETS COUNTRIES WHERE **176** million people depend on **MAIZE-BASED AGRICULTURE**



Only **57%** of the maize cropping area in SSA IS PLANTED USING **MODERN VARIETIES**



On average, **THE VARIETIES GROWN BY FARMERS IN SSA ARE TOO OLD: 28** YEARS (HYBRIDS) **40** YEARS (OPEN-POLLINATED)

Funders

BILL & MELINDA GATES foundation



Partners



National Agricultural Research Systems

Seed companies

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