

Promotion of *Striga* Resistant Varieties of Sorghum in the Sahel of West Africa

Striga, the witch weed, is the biggest biological hindrance in grain production in the Sahel of West Africa causing yield losses of more than 40%, and in some cases they cause complete crop failure.

Sorghum is one of the most important cereals adapted to drying conditions characteristic of the Sahel of West Africa. It provides up to 25% of the calorie needs of the people in some countries. It is also a very important source of livestock feeds and is recently being used in the brewing industry, amongst other uses. Current varieties have yield potentials of 4.5 tons per hectare, but they are highly susceptible to *Striga*, an obligate parasitic weed. Recently, *Striga* infestation in the Sahel has become alarming, causing farmers to abandon their lands. *Striga* has continually weakened the productivity of sorghum and other cereals and grain legumes in this zone. The deployment of *Striga* resistant varieties alongside integrated management holds the key to sustaining yields in this zone.

This project is promoting adaptation and uptake of integrated *Striga* management. It is also coordinating the distribution and use of *Striga* resistant varieties of sorghum in Burkina Faso, Mali, Niger and Senegal. The activities in this project are particularly important at this time because improved varieties resistant to *Striga* are still unknown and rarely used by producers in rural areas, who still rely mostly on sorghum land races. This project is based on the principle that a strategic coordination and systematic promotion of integrated *Striga* technology with resistant sorghum varieties as an entry point is key to sustaining production and ensuring food security in the Sahel.



Striga on sorghum. Photo: IITA

Main beneficiaries

Sorghum farmers will benefit from improved yields resulting from increased use of *Striga* resistant varieties. National agricultural research scientists will benefit from advanced techniques in selecting for *Striga* resistance. Grain marketers will benefit from increased supply of quality grains. Extension and advisory service agents will benefit from new improved cultural techniques for transfer to farmers.

Main regional benefits

Striga resistant varieties of sorghum and cultural techniques will be out-scaled to all countries of the region.

Partners

This CAADP-aligned project is funded by USAID, and is coordinated by CORAF/WECARD. The implementing partners are Institut d'Economie Rurale (IER), Mali; l'institut de l'environnement et de recherches agricoles (INERA), Burkina Faso; and Institut Sénégalais de Recherches Agricoles (ISRA), Senegal, and ICRISAT. The project is working directly with several farmers groups, and community-based organizations

Components	Outputs	Outcomes	Impacts
1 Creating Partnerships	<ul style="list-style-type: none"> Technology transfer platforms created Partnerships agreements signed Data base on partners working on sorghum in the sub-region developed 	Outcome 1 Sustainable institutional arrangements for technology transfer in <i>Striga</i> management	Abandoned Striga-infested arable lands reclaimed Well-being, livelihoods and food security of producing communities improved in Burkina Faso, Mali, and Senegal
2 Capacity Strengthening	<ul style="list-style-type: none"> Training manuals developed Capacity of farmers to use Striga resistant sorghum varieties strengthened 	Outcome 2 Tools and best practices in seed production assimilated by producers and seed entrepreneurs Outcome 3 Increased availability of a local pool of experts in technology use Outcome 4 Increased adoption of best practices in the use of Striga resistant sorghum	
3 Seed Production	<ul style="list-style-type: none"> Seed producing farmers and entrepreneurs in the communities identified Striga resistant sorghum seeds produced for mass distribution 	Outcome 5 Increased availability and use of improved varieties of sorghum resistant to Striga	
4 Technology Adaptation & Adoption	<ul style="list-style-type: none"> Baseline data developed An inventory on <i>Striga</i> infestation sites developed Striga resistant varieties of sorghum identified and delineated by country Adapted Striga resistant sorghum varieties proposed 	Outcome 6 Improved and sustained sorghum productivity	

For more information

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