

PARTNERS ISSUE ONE 2017



ABOUT THE DISH

Among the food crops grown in eastern Africa, maize is the main staple and legumes provide an important dietary protein source for the rural poor. Legumes are widely used as an intercrop in maize systems and are a significant source of income for women. The demand for maize and legumes is projected to increase substantially over the next 10 years but seasonal variability causes wide swings in food crop yields, including those of maize and legumes. The intensification and stabilisation of rain-fed maize-legume cropping systems offers considerable promise for boosting productivity, improving food and nutrition security and helping reverse the decline in soil fertility.

MAIZE AND LEGUMES IN EASTERN AND SOUTHERN AFRICA

The Sustainable Intensification of Maize-Legume Cropping Systems for Food Security in Eastern and Southern Africa (SIMLESA) project was developed as part of Australia's Africa Food Security Initiative. Building on completed ACIAR projects in eastern Africa, much work was carried out on maize and legumes. Combined rain-fed maize-legume cropping systems have shown considerable promise in boosting productivity and helping reverse the decline in soil fertility that is a fundamental cause of low smallholder productivity in eastern Africa.

Sustainable intensification of maize-legume cropping systems while reducing yield variability requires an integrated approach in the context of a complex production and marketing system. Through participatory research and development with farmers, extension agencies, non-government organisations and agribusiness, the SIMLESA

project aims to improve maize and legume productivity by 30% and reduce downside yield risk by 30% on about 500,000 farms within 10 years.

THE PROJECT

Partner countries involved include Ethiopia, Kenya, Malawi, Mozambique, Tanzania and Australia, with input from South Africa. The project was managed by the International Maize and Wheat Improvement Center (CIMMYT), in collaboration with the Association for Strengthening Agricultural Research in Eastern and Central Africa (ASARECA), partner country research entities, other CGIAR centres and Australian partners.

Across the life of the project, SIMLESA was successful in introducing and scaling out various sustainable intensification technologies initiated and tested in the first phase. Some of the benefits experienced by the smallholder farmers included better access to improved varieties of maize and legumes. Reporting has indicated that the majority of farmers in the target areas are now using 'best bet' maize, legume and forage varieties. Teams have observed strong stakeholder involvement in on-farm and on-station participatory varietal selection (PVS) trials, including private seed companies, fertiliser companies, input dealers, local authorities and extension officers. In addition, numerous seed growers were effective in implementing seed road maps for varieties selected by SIMLESA and delivering improved seed to farmers, and the International Crops Research Institute for the Semi-Arid Tropics supplied seed of short, medium and long-duration pigeon pea varieties to Kenya, Malawi, Tanzania and Mozambique.

Mozambique Cowpea Curry with Maize Xima

Ingredients

Cowpea Curry

1 cup or 100 g of cowpeas*

50 g meat (beef, goat, pork) - optional

1 tsp salt

1 medium onion

3 medium tomatoes

50 ml cooking oil

vegetables (cabbage, kale or mustard greens)

water

* Can also be made with common beans, cowpea grain (dried or fresh) or dried soybeans.

Maize Xima

200 g maize meal 500 ml to 1 L of water

Method

Cowpea Curry

- Clean dried or fresh cowpea grain by removing any dirt and washing with water.
 Add water to cowpeas in a pot and bring to boil. Continue adding water and boiling until beans are cooked.
- 2. In a separate pot, season meat with salt and cook. Chop and cook onions and tomatoes with oil and salt. Add the cooked cowpeas, meat and diced vegetables and cook for a few minutes. Season to taste.

Maize Xima

- Bring water to boil in a pot. In a bowl, mix some of the maize meal (about 20 g) with some cold water and stir to form a paste. Add the paste to the boiling water, stir very well and boil for about
 minutes.
- Add remaining maize meal gradually while stirring. Stir xima into curry.Serve curry with xima.

Serves 4

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Sustainable intensification of maize-legume cropping systems for food security in eastern and southern Africa II (SIMLESA II).

MORE INFORMATION

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