Fact Sheet

CIMMYT
International Maize and Wheat Improvement Center

# SCALING OUT
## sustainable agriculture in Malawi

### Key facts

**Through SIMLESA, 21 improved maize and legume varieties have been released to smallholders.**

**Conservation agriculture (CA)-based sustainable intensification has increased from 4% in 2010 to 35% in 2017.**

**CA-based cropping systems have increased maize yields by 37% in low-altitude areas.**

**1,017 women have received training in CA at demonstration days.**


Credit: T. Samson/CIMMYT

### Project sites:

- Mid-altitude agro-ecology: 600-1000 mm of rain per annum
  - Kasungu, Mchinji and Lilongwe districts
- Low-altitude agro-ecology: high temperatures and 500-600 mm of rain per annum
  - Ntcheu, Balaka and Salima districts

### Activity locations:


### Technology package:

The Sustainable Intensification of Maize-Legume Cropping Systems for Food Security in Eastern and Southern Africa (SIMLESA) project has tested and promoted:

- A more diversified tillage system to reduce soil erosion.
- Increased spatial diversity and crop diversification to reduce agricultural risk.
- The use of drought tolerant crop varieties.
- Sustainable intensification options in maize legume-based cropping systems, such as intercropping and crop rotation to improve yields.
- Improved agronomic practices, such as timely planting and weed control.

### Farmer challenges:

- Increased erratic rainfall and drought.
- Lack of credit to buy inputs.
- Lack of seed due to recycling practices among farmers and a lack of seed multiplication.
- Lack of understanding/skill to use technologies.
- Monopoly of the input market.


Credit: T. Samson/CIMMYT

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# SIMLESA approaches

- Enhance market access by establishing partnerships between farmers and the public/private sector, and through the formation of farmer groups, associations and cooperatives.
- Improve the efficacy of extension services through capacity building.
- Inclusive development of technologies with farmers through on-farm exploratory trials and participatory seed variety selection trials.

Credit: T. Samson/CIMMYT

# Achievements

- Over 51,000 farmers have adopted the CA-based sustainable intensification practices.
- CA-based cropping systems increased maize yields by 37% in the low-altitude areas.
- 36 on-farm exploratory trials have been established.
- Six innovation platforms involving 538 farmers have been established to improve agricultural information exchange and collective action.
- CA-based practices led to a 16% decrease in agricultural production risk.
- Over 2,500 farmers attended CA demonstration days, 1,017 of whom were female.
- 10 improved maize varieties have been tested and released to farmers.
- CA-based cropping systems increased maize yields by 19% in mid-altitude areas.
- 354 farmers participated and graduated from 12 farmers field schools established by SIMLESA in Lilongwe and Balaka districts.
- 11 improved legume varieties have been identified and released to farmers.
- In Balaka district, 175 women farmers adopted mulching without using herbicides, and over 200 female-headed households are practising maize and pigeonpea intercropping.

# Scaling out

- ☑ Via its networks of farmer groups, the national farmers' association, NASFAM, scaled out the CA-based technologies and improved maize and legume varieties to a further 22,800 households.
- ☑ Via radio and other ICTs, Farm Radio Trust has reached 20,000 farmers.
- ☑ To multiply improved seed varieties, in addition to using its own research stations, SIMLESA-Malawi is contracting seed growers and farmer associations.


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**References**


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