AGRA
Growing Africa's Agriculture

AGRA Impact Series

# Makueni smallholder farmers get 'more than expected' with regenerative agriculture practices

Farmers like Fridah Muendo have improved their harvests and food security thanks to support from AGRA and the CGA's Regenerative Agriculture project.

**How improved farming practices helps farmers and the environment.**

**"Today, I apply this Regenerative Agriculture (RA) in the whole field."**

The village of Kinyonga in the Kaiti Constituency of Makueni County was once known for its maize production. Nowadays it is reeling from the impact of weather fluctuations due to climate change, land degradation, and limited access to extension services and weak input and output market linkages.

Thirty-three-year-old Fridah Muendo is married and a mother of 3 children who are all being educated at levels ranging from primary school to secondary and is one of the 73 members of the Kinyongo Self Help group. Fridah credits the improvement in her family life directly to help from AGRA - RA sponsored project in her community.

In July 2020, Fridah, was selected by CGA's Coordinator in Makueni County with the help of Ukia Ward agricultural extension officer, Mr. Joel Matheka, as a Village Based Advisor (VBA). She is one of 114 VBAs in Makueni County who have been trained in Regenerative Agriculture (RA) and Climate Smart Agricultural (CSA) practices and technologies. The AGRA supported project aims to improve food security, community and ecosystems resilience through adoption of regenerative agriculture practices and technologies among smallholder farmers and also to strengthen the community-based public-private extension system in the county.

Before the project began in Kaiti area, agricultural productivity

was very low due to poor farming practices among farmers. In September 2020, CGA trained Fridah and other VBAs in RA and CSA practices and technologies such as minimum or zero tillage, cover cropping, intercropping (use of legumes), crop rotation, compositing, use of organic mulch, agro forestry, drought tolerant crop, certified seeds and soil and water conservation structures such as terraces and basins. They were also trained on business -to-business linkages and post-harvest management skills.

Once she qualified, Fridah transferred her skills and knowledge to her fellow farmers by establishing the Kinyongo farmers Self Help Group. So far, she has trained 73 farmers on RA and CSA practices and technologies.

Using Mother and Baby demonstration plots, Fridah taught farmers how to prepare land, space seeds and how to apply manure and crop protection. Farmers also learned how to use manure, mulching, fertilizer and minimum tillage to help increase production and thus earn more income.

By applying the skills, she learned from the training and Mother demo plot, Fridah has improved her farm with better practices. In the past, she only used to plant Maize. She did not know about soil and water conservation structures or agroforestry but with the training on RA and CSA practices and technologies, she now intercrops pigeon peas and maize and cowpeas as well. Fridah has also established a tree nursery in her farm and implements soil and water conservation measures such as the use of terraces.

“When the farmers were introduced for the first time to RA practices, they had concerns on its efficiency. Some farmers even opted out of the group. We tried it. When harvest time arrived, we got more than expected. Today, we apply RA and Climate Smart Agricultural practices and technologies in the whole farm,” said Fridah.

“I look forward to making good profits from now on,” she adds.

Using the Village Based Advisors (VBAs) business model, the project demonstrates improved RA practices and technologies, using Mother-Baby approach. This approach facilitates farmer learning from the demonstration site -

**“When the farmers were introduced for the first time to RA practices, they had concerns on its efficiency. Some farmers even opted out of the group. We tried it. When harvest time arrived, we got more than expected.**

**Fridah Muendo**

‘mother’ and trialing on their own plots - ‘baby’. Comparison is then made on performance of ‘mother and baby’ plots to assess level of learning and adoption of trained practices and technologies by farmers.

Fridah is now considered a resource on the use of RA and Climate-Smart Agriculture technologies that have reduced production costs by one-third, improved her farm soil and increased her crop yields.

“Before I started to use RA practices and technologies, I would only harvest 3 bags of maize per acre. Now I harvest an average of 6 to 10 bags per acre,” says Fridah.

Through CGA training and extension services, Fridah developed entrepreneurial skills and was linked to grain value chain actors, utilizing those skills, Fridah has set up a cereal store where she offtakes grains from her farmers, and farmers from the surrounding villages. She also sells post - harvest handling equipment such as hermetic bags, hand shellers and tarpaulins. She has increased her monthly net income from about KES 10,000 to KES 30,000.

“I am currently aggregating beans not only from the 73 farmers but all farmers from the surrounding villages”, she notes proudly.

To encourage farmers to experiment with RA and CSA practices and technologies on their own

Joseph Mulu in his Baby demo maize farm, grown with help from Village Based Advisor supported by AGRA and the CGA.

farms (baby demos), the project also partners with seed and fertilizer companies to support VBAs by providing small pack inputs as well as inputs for their Mother demonstration farms, which have proved to be effective in rapidly creating demand for seeds and fertilizers by the farmers.

The demonstration plots performed very well (heathy maize cobs and bigger bean sizes) compared to plot where RA practices were not used and because farmers tried the technologies on their own farms, they were able to appreciate the difference between their traditional way of farming and the RA and CSA practices and technologies offered by Fridah.

Most of the farmers who have adopted RA and Climate Smart Technologies are enjoying a bumper harvest and look forward to be able to improve their long-term income and food security.

Joseph Mulu, a 72 year old smallholder farmer and a father of 12 children, is a beneficiary of Fridah's training. He adopted RA and Climate Smart Agricultural practices and technologies.

In October 2020, Mulu planted improved seeds which he acquired through Fridah on his 3 acre farm, and used terraces and manure, as advised by Fridah. Despite the poor short rains, Mulu says he has increased his harvest from 8 to 11 bags to 14 to 18 bags of 90 Kilograms due to use of RA practices.

Joseph Mulu in his Baby demo maize farm, grown with help from Village Based Advisor supported by AGRA and the CGA.

"RA has shown us the way to success. Now I produce more than I need for food and I can sell the surplus to make money" said Mulu.

"Farming using RA in our village is now a big deal. If you follow RA practices, you are sure to kick out poverty!" He added.

Today, many smallholder farmers from Kinyongo village in Kaiti Constituency are inspired by Fridah's success and will similarly use RA and CSA to increase their own incomes without degrading the environment from the March-May short rain season.

The project which is supported by Alliance for a Green Revolution in Africa (AGRA) and implemented by Cereal Growers Association (CGA) has reached over 13,225 smallholder farmers.