

Farmers in Nzau district in Kenya's Eastern Province start to benefit from improved cassava varieties, developed by KARI

Project update: April 2011

In Kenya, as in most countries in sub-Saharan Africa, technology is available in research stations to increase crop yields by ten times or more, but small-holder farmers suffer from a lack of information, and access to this technology. Over the last 8 years, FIPS-Africa has developed an innovative methodology to help as many small-holder farmers as quickly and cost-effectively gain access to the appropriate farm inputs to help them to improve agricultural productivity, to alleviate hunger and attain food security.



In Kenya's Eastern Province, cassava is arguably the most important food security crop. It survives periods of drought, grows well in poor soils, and performs better than cereal crops. The cassava crop, however, has been devastated by the cassava mosaic virus over the past 10 years, and most farmers have stopped planting the local varieties, which are highly susceptible to the disease. Breeders at KARI's Katumani Research Centre have developed new high-yielding, early-maturing varieties of cassava, which are resistant to the Virus. In 2010, FIPS-Africa started to disseminate new varieties through its Network of 15 Village-based Advisors in Nzau district.

Since then, Eastern Kenya experienced a drought at the end of 2010 resulting in complete failure of maize for most smallholder farmers. Currently, the region is experiencing a 2nd drought and maize is expected to fail again. In April 2011, FIPS-Africa visited farmers who received the new varieties of cassava to check on their performance and to determine the impact of the new varieties on farmers' food security and livelihoods. Testimonials of farmers are provided in the following pages



1. Peterson Musyoka, Ngaa Village, Githumbani Location; 1191m, S01.98611°, E037.61818°



Peterson purchased 100 stems of the *MM96/5283* cassava variety from FIPS-Africa Village-based Advisor Richard Muli in April 2010. He had previously grown the traditional variety which completely dried up due to drought. The farmer has sold over 500 kg, selling for KSh 30/kg thereby earning KSh 15,000. He started harvesting in December 2010 and says there is enough food for his family of 5 that will last a year. The farmer has also distributed over 200 cuttings to about 20 farmers.

2. Richard Maunzu, Gatune village, Mulala Location; 1163m, S02.04348°, E037.47631°



Richard received 20 cuttings of the *Ndoro* cassava variety in November 2010. He had also planted the traditional variety at the same time but it dried up due to prolonged drought. He is impressed with the vigour of the new variety but says the tubers need more time to mature.

3. Ann Mwanile, Mithine village, Matiliku location ; 1218m, S01.98118°, E037.61818°



In September 2010, Ann purchased 50 cuttings of the *Ndoro* cassava variety from FIPS-Africa Village-based Advisor Richard. She started harvesting the tubers in March 2011 and has so far harvested about 20 tubers for home consumption. The farmer had previously grown the traditional variety that was infected with the CMV, and produced tiny tubers.

4. Lilian Muli; 838m, S02.39459°, E038.00191°



Lilian received 40 cuttings of the *990005* cassava variety from FIPS-Africa Village-based Advisor in September 2010. She had previously grown the traditional variety that was heavily attacked by the cassava mosaic disease, and only produced very small tubers. In March 2011, she started to harvest the new variety and she has so far harvested over 60 tubers. She sold 50 of them for a total of Ksh 2,000 that helped her buy sugar, kerosene, flour and other household items for her family. She has used the stems from her harvested plants to increase the area of planting. She has also given 10 stems to each of 10 neighbours. She has also benefited with food for her family which she says will last for 3 months.

5. Mary Mathike, Mithine village, Matiliku location; 1176m, S01.98247°; E037.63789°



Mary purchased 100 cuttings of the *Msherisheri* cassava variety from FIPS-Africa Village-based Advisor Richard Muli in August 2010. She has been feeding her family of 8 with the cassava tubers for the past one month reducing her expenditure on food. She says that it takes only one tuber to feed the family. The farmer has grown the traditional variety for many years but admits that the improved variety takes less time to mature, is drought resistant and the tubers are much bigger and sweeter than the traditional variety.

6. Georgina Mulinge, Mithine village, Matiliku Location; 1094m, S01.96237°, E037.52799°



In July 2010, Georgina purchased 100 cuttings of the *Msherisheri* cassava variety from FIPS-Africa Village-based Advisor, Richard Muli. She had previously grown the traditional variety that was heavily infected by cassava mosaic, and dried up due to drought. She sold 300 kg in February 2011, selling for KSh 40/kg and got KSh12,000 that she used to repay a loan. She says she has enough food to last the family for a whole year and her expenditure on food has become minimal.

7. Anastatia Munyao, Mithine Village, Matiliku Location; 1029m, S01.99343°, E037.58698°



In December 2009, Anastasia purchased 100 cuttings of the 990005 cassava variety from FIPS-Africa Village-based Advisor Richard Muli. She has so far sold over 300 kg since September 2010, selling for KSh.40 per kg. She has therefore earned KSh12,000. She says the improved variety has bigger and much sweeter tubers than the local variety. She has now increased the area of her cassava plantation, and has also given over 400 cuttings to about 30 farmers. She also said that she spends less money on food and has enough food to last the family for a year.

8. Alice Ndunge, Ngaa Village, Githumbani location; 1162m, S01.942029°, E037.61781°



In July 2010, Alice purchased 30 cuttings of the *Ndoro* cassava variety from FIPS-Africa Village-based Advisor Richard Muli in July 2010. The mother of 3 had never grown cassava before. She estimates she will harvest about 300 kg and is planning to sell 200 kg for KSh 40/kg. Alice has been harvesting the tubers for the past month that she has used to prepare breakfast and lunch for her family and she also uses the leaves as a vegetable. This, the farmer says, has reduced her expenditure on food.

9. Kambua Mutisya, Nzau District; 1117m, S01.95028°, E037.51789°



Kambua purchased 60 stems of the *ex-Mariakani* cassava variety in August 2010 from FIPS-Africa Village-based Advisor, Richard Muli. She started harvesting in February 2011 and has sold tubers worth Ksh 7,000. In addition, the mother of 6 says she has enough food for the family to last a whole year. She also uses the leaves for stew. She says that the improved variety takes less time to mature and is drought resistant. She has also sold over 100 cuttings to about 10 farmers and has increased the area of her plantation.

10. Purity Mwikali



Purity bought 30 stems of the *990005* cassava variety in September 2010 from FIPS-Africa village-based Advisor, Mutulu Muthoka. She is a regular grower of the traditional variety but she claims that it takes up to 1.5 years to mature while the improved variety takes only 7 months. She has so far harvested over 50 tubers. Of these, she sold 30 tubers, selling for Ksh 35 per tuber, earning KSh1,050 that she spent on buying stationery for her children. The farmer adds that the tubers from the *990005* variety are bigger and sweeter than from the local ones. She says that she has enough food to last her family of 6 for several months.

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