Project Summary

Cassava is a drought tolerant food security crop in Kenya, mainly grown for subsistence and limited commerce in western, eastern and coastal regions. Its demand is increasing in non-traditional growing regions like Nakuru County where a cassava agribusiness development initiative has been implemented by the government, Mtakatifu Clara (a CBO) and Egerton University. However, take off of cassava agribusiness has faced challenges because farmers used varieties susceptible to Cassava Brown Streak Disease (CBSD), late maturing, low yielding and less adaptable to the environment. These have slowed upgrading of the cassava value chain. Improved sweet varieties with CBSD tolerance have commercial potential to replace 10-30% maize in animal feeds and 60-70% in six confectionery products and replace 60% barley in beer malt. Such technologies would reduce costs of feed, food and beer because it is a government policy to reduce taxes by 60% on cassava or sorghum beer. Cassava enriched with camel and goat milk for human biscuits and enrichment with prosopis and acacia pods would improve nutrition for children and animals, respectively, at low costs. Improved CBSD would increase yields and farm productivity, and produce surplus for products development. Commercialization of cassava will ease the pressure of wheat in the bakery industry, maize in the feed industry and barley in the beer industry and save on the grain imports and country’s foreign exchange. The low-priced beer would address the social problem of lethal illicit brews consumption in Kenya. The general objective of the project is to contribute to improved food, nutrition and income security of small holder farmers through innovations in the cassava value chain. The specific objectives are: i) to screen cassava varieties to select suitably adapted early maturing sweet varieties for the arid and semi-arid lands (ASALs) of Nakuru County in Kenya. ii) to improve CBSD resistance in selected varieties using Marker Assisted Selection techniques with ‘Namikonga’ as a source of resistance. iii) to develop high value cassava based food, feed and industrial products for improved food, nutrition and household incomes. iv) to build capacity of graduate, and undergraduate students at the University in development and testing of cassava food and feed products. Training will target TVET students, women and youth groups and farmer producer groups in production, processing and marketing of cassava based products, cassava breeding, and food science.

Key words: Nakuru County, Cassava value chain, TVET students, CBSD resistance