

Improvement of Cassava Production, Processing, Marketing and Utilization Through Introduction of Disease-Tolerant Cassava Varieties

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Abstract

A baseline survey was conducted in Tongwe, Kabuku, Chanika and Mikongeni villages, located in the Districts of Muheza, Handeni, Ilala and Kibaha, respectively, in the cassava growing ecosystem of Tanga, Coast and Dar es Salaam regions. The objective was to establish baseline data as entry point for improving production, utilization, processing and marketing of cassava in these areas. The survey involved 104 households, represented by 62.5% male and 37.5% female farmers, using a structured questionnaire. The results were coded and analysed using the SPSS statistical package. It was observed that majority of households farmed on land size of less than 2 ha, with about 80.2% farming on their own land and 91.8% farming on rented land. Most farmers (54.7%) produced less than 1.25 MT of fresh cassava roots per hectare, with a few producing as far as 10 times more. The crop was slightly more of a cash crop than a food crop, with yearly mean production of 2.18 MT compared with 1.44 MT (53%) sold. Production faced limitations, especially lack of market (37.6%) and low disease tolerance (19.8%). The varieties grown were mainly Kiroba, Cheupe, Cheusi Mwangia and Mkunungu in Tongwe, Chanika, Mikongeni and Kabuku villages, respectively. Introducing new varieties as a solution to the reported problems is required but the essential attributes should be: high disease tolerance (28.5%); high yield (25.9%); sweetness when chewed (13.8%) and early maturity (10.5%), which are potential factors towards solving marketing problems. In a follow-up program, Kiroba variety, which is a relatively high disease tolerant variety, was introduced in Kabuku, Mikongeni in Chanika villages to farmer groups and individual farmers. While results in Mikongeni and Chanika did not show remarkable changes Kabuku village registered very positive impacts, just after two years. These include the increase of the numbers of farmers groups from 1 to 3, individual farmers from 20 to 37, overall area planted from 2 to 4.6 hectares, yield from average of 1.25 to 18 MT per hectare and cash earned per hectare from almost zero to 800,000 shillings and average price of about 4,500 shillings per 100 kg of fresh cassava. Introducing disease-tolerant cassava varieties could change the status of this crop and contribute to improved livelihood. For sustainability of the processing industry, pricing of raw materials should not exceed that for the fresh market during high price seasons.

Key words: Baseline data, production limitations, attributes, impact and livelihood
