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Introduction

Cassava is currently the second most important staple and food security crop after banana in Uganda (Kleih et al., 2012). Uganda is the sixth largest producing country in Africa with an estimated 5.2million tonnes produced in 2013 (FAOSTAT; 2013).

Problem Statement

The major constraint faced by large-scale production and marketing of fresh cassava roots is the rapid postharvest physiological deterioration (PPD) that occurs two days after harvesting the roots. This reduces the eating quality, transportation range, and financial value of fresh cassava (Booth, 1976; Buschmann et al., 2000; Westby, 2002; Lyer et al., 2010),consequently reducing on returns to investment in fresh cassava businesses.



Figure 1. Freshly harvested cassava roots in mid western Uganda.

Approach

A fresh cassava value chain analysis was conducted in Aug/2015 in mid-western & central Uganda, on a random sample of 60 farmers, 17 Wholesaler, 115 retailers & 65 consumers.

Results

63% of the farmers were female, 12% of the wholesalers were females, and 59% of the retailers were female, revealing that females were mostly located at the end nodes of the value chain, where returns to investment were very low.



Figure 2. Freshly harvested cassava roots being displayed for sale in a market in south western Uganda.

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The study also revealed that retailers mostly women suffered most of the effects of PPD, being that they stayed with the fresh roots for longer periods (up to four days) than any other actor in the value chain. The wholesalers buy from farmers and transport the fresh cassava roots to the market within 12hours of harvesting. Retailers then purchase the roots and display them for retailing in open markets for over two days hence suffering economic & physical losses of up to 40%, due to PPD.

Chain actor	Revenue (US \$ per Kg)	Cost price (US \$ per Kg)	Gross income (US \$ per Kg)	Gross margin
Farmer	0.112	0.106	0.006	5%
Wholesaler	0.159	0.112	0.047	29%
Retailer	0.183	0.159	0.023	13%

Source: Value chain analysis report, August 2015.

Marginal analysis showed that farmers received 5% of gross margin, wholesalers 29% and retailers 13%. This small margin coupled with PPD associated losses, have become a disincentive to women's increased participation in retail marketing of highly demanded fresh cassava roots yet most of the cassava produced (60%) by farmers is sold in fresh form to the market.

Conclusion

Fresh cassava is widely eaten across the country but postharvest deterioration is a big threat to traders, so any technology that will address this problem will benefit a large number of farmers and traders, most of whom are women as revealed by the current study.

The Research being carried out in Uganda by IITA, NARO & IIRR to establish the effectiveness of two shelf-life extension technologies on fresh cassava roots i.e. waxing and high relative humidity storage methods will increase demand, and retail marketing participation of women while retaining the desired quality traits for fresh cassava roots.