

**Contract Farming Arrangements Under Co-operative Model and the Performance of  
Smallholder Sugarcane Farmers in Kilombero Valley, Tanzania**

**By**

**Julieth Ally Koshuma**

**PhD, Moshi Co-operative University**

**[2024]**

**Extended Abstract**

Contract farming (CF) practices have become a favourable approach for farmers as well as agribusiness companies who have common interests in sharing the risks involved in producing and marketing various crops. Also, they have been adopted by agribusiness firms and co-operatives to ensure the quality and constant supply of raw materials to the market or buyers. Contract farming in Kilombero Valley has been working under Agricultural Marketing Co-operative Societies (AMCOS) since 2017. However, whether CF, through AMCOS in Kilombero Valley, has contributed to smallholder sugarcane farmers' performance has not well been explored. Therefore, this study was conducted specifically to: determine the socio-economic determinants of smallholder sugarcane farmers' participation in contract farming through AMCOS, determine sugarcane farmers' satisfaction with contract farming service quality under the co-operative model, examine the impact of the co-operative members' contract arrangements on sugarcane farming, and examine the impact of the co-operative model on smallholder sugarcane contract farmers' performance in Kilombero. Cross-sectional and quasi-experimental research designs were used to guide the study based on the nature of the variables. The quantitative data were collected through a survey that which covered a sample of 433 respondents. Key Informant Interviews, Documentary Reviews, and Focus Group Discussions were conducted to collect qualitative data which were then analysed based on the content and meaning of the text per each study objective.

The quantitative data were analysed using descriptive statistics, binary logistic regression, structural equation modelling based on the partial least square, propensity score matching, independent samples t-test, difference in difference, and ordinal logistics regression. The findings showed that age, marital status, farming experience, land size, and land ownership were positively influencing smallholder farmers to participate in contract farming through

AMCOS ( $p < 0.05$ ). The findings on smallholder sugarcane farmers' satisfaction with the service quality provided through AMCOS indicated that service quality dimensions such as tangibles, assurance, and empathy had a positive relationship with farmers' satisfaction and were statistically significant at  $p < 0.05$ . Furthermore, the findings revealed that contract farming arrangements provided to smallholder sugarcane farmers after AMCOS improved whereby the  $t = 9.68$  and it was significant at  $p < 0.05$ , compared to those previously offered under farmers' associations. The findings further revealed that smallholder farmers' performance increased, whereby the sugarcane production was significant ( $p = 0.00$ ). It is, therefore, concluded that 65% of the smallholder sugarcane farmers voluntarily participated in contract farming through AMCOS. Accordingly, smallholder farmers were satisfied by 21% with the better services offered through AMCOS. In addition, the study concludes that the contract farming arrangements provided to farmers through AMCOS improved. The study further concludes that smallholder sugarcane contract farmers' performance has improved relatively since they adopted AMCOS. The study recommends that AMCOS and the Tanzania Co-operative Development Commission (TCDC) should continue providing co-operative education to non-AMCOS members to motivate them to join AMCOS. Moreover, AMCOS should ensure consistency of service quality to their members. Similarly, AMCOS should ensure the contract farming arrangements are provided to farmers as per agreement. The study further recommends that the TCDC, the Sugar Board of Tanzania (SBT), and the sugarcane buyers, in collaboration with AMCOS, should ensure farmers' production keeps on increasing and ensure these farmers have a reliable market. This should include expanding the capacity of the sugar processing mills or allowing other buyers (sugar-producing industries) to buy sugarcane from farmers to reduce the market monopoly.

**Keywords:** Contract farming, sugarcane, co-operative model, Kilombero, valley, smallhold farmers