

Strengthening Extension System in Tanzania: Innovative Knowledge-Sharing Approaches for Improving Coffee Productivity and production

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Introduction

Coffee production in Tanzania has stagnated at 65,000 tons annually over the past ten years, fluctuating between 60,000 and 85,000 tons, which is below the country's potential of producing 200,000 tons per year. The stagnance has been contributed by inadequate extension system. An effective extension system depends on how well knowledge is shared among farmers. Despite decades of investment in agricultural extension, knowledge gaps persist among smallholder farmers in Tanzania [1]. Traditional top-down dissemination approaches often fail to ensure comprehension, relevance, and translation of technical knowledge into routine on-farm practices [2]. This study responds to the need for more effective delivery by examining innovative knowledge-sharing approaches implemented by the Tanzania Coffee Research Institute (TaCRI) to strengthen the coffee extension system for increasing coffee productivity and production in Tanzania.

Materials/Methods

Tanzania Coffee Research Institute (TaCRI) has been implementing several strategies aimed at increasing productivity and production among smallholder farmers. Further much emphasize has been on strengthening extension system for the delivery of clear extension messages to coffee growers through effective knowledge sharing. These include but not limited to, capacity building to both public and private extension officers, provision of transport facilities to extension officers and farmer promoter, the use of farmer promoters/lead farmers, exchange visits among farmers and extension officers, provision of technical backstopping, participatory farmers training manual development, and establishment of farmer and lead farmer-managed demonstration plots.

Conclusion/Perspectives

This paper has presented the innovative knowledge-sharing approaches used by TaCRI to improve the effectiveness of coffee extension systems and increase productivity and production. Continued application and scaling up of these approaches are recommended to strengthen farmer capacity and ensure sustainable coffee production in Tanzania.

References:

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Results/Discussion

The application of diverse knowledge-sharing approaches has significantly strengthened Tanzania's coffee extension system. Establishment of 1,902 farmer and lead farmer demonstration plots has provided farmers with hands-on learning platforms, improving their adoption of good agricultural practices. 4,673 technical backstopping visits have reinforced farmer-extension linkages, facilitating timely technical support and problem-solving. Training of 2,983 extension officers has built institutional capacity for consistent and high-quality delivery of clear extension messages. Concurrently, 2,036 trained farmer promoters have enabled peer-to-peer knowledge transfer, accelerating diffusion of innovations at community level (**Fig. 1**). Collectively, these approaches have led to increased uptake of recommended practices and enhanced coffee productivity and production in areas where these interventions have been successful implemented (**Fig. 2**).

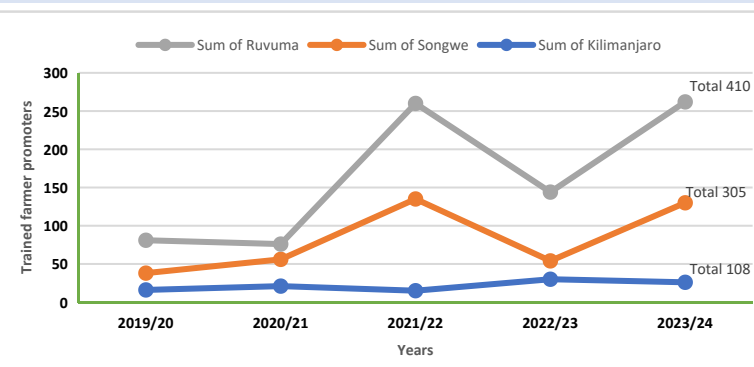


Figure 1: Trained of farmer promoters/Lead farmers

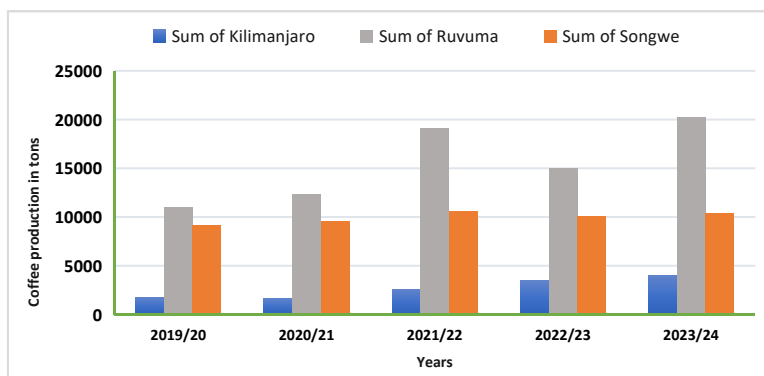


Figure 2: Coffee prpduction in Regions with active farmer promoters participation in technology dissemination