

Influence of Economic Factors on Sorghum Production in Makueni County Kitise Ward

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Abstract

Agriculture is the backbone of the African economy. It is a way of life, a source of life and a product of life. It accounts for 35% of the continents' GDP, 40% of the export earnings and 70% of employment. Sorghum(*sorghum bicolor*) contributes to food security of many of the world's poorest, most food-insecure agro-ecological zones. It is unique due to its tolerance to drought, water logging and saline-alkali infertile soils and high temperature. It is a significant cereal crop, falling behind only rice, maize, wheat and barley. A recent trend has shown that farmers particularly in the Eastern region of the country are slowly shifting to increased sorghum production. This project was developed to evaluate this and other factors that are contributing to this shift. The study site selected was Kitise Ward, Makueni County, where a sample of 50 farmers was selected on a purposive basis. Open and closed questionnaires were used to draw information on the varieties of sorghum that farmers grow, the yield and income benefits they derive from this enterprise, and the constraints they face in production. Microsoft excel computer software was used to analyze the data collected, for drawing of results and conclusions. At the end of the project, it was found that a majority of the respondents (25%) integrated both maize and sorghum into their farms. These were followed by sole maize producers (48%), with sole sorghum producers trailing at 8%. Those producing sorghum preferred the karr mtaira variety (47%) while 33% prefer the Gadir variety. For maize, the Kattirani variety was preferred (80%) because it matures fast and survives well. The Kikairba variety came next (11%), with the pioneer variety last. On analysis of costs versus benefits, it was found that farmers under an irrigated system tend to get much higher yields than farmers under the rain-fed system. Under the rain fed system, it was further found that sorghum performed better than maize, with the latter even yielding a loss to some farmers. As far as constraints faced in production were concerned, the major limitation in sorghum production was the quelea bird, followed by poor soils. Poor rainfall was not a major issue, seeing as sorghum is a hardy crop. For maize producers under a rain fed system, poor rainfall was their major limitation, followed by pests and diseases, especially the outbreak of maize Lethal Necrosis. In conclusion, it was found that although there is a shift towards sorghum production, this progress is slow.

Sorghum suffers psychological loss, with most farmers and customers still preferring maize and its products on their table. Nonetheless, the potential for sorghum as a means to curb food security could not be ignored, as was seen especially by farmers producing both of these crops: they cited sorghum as good security in the event of maize crop failure.