

Adoption and Utilization of Ethno-postharvest Technologies by Smallholder Farmers in Semi-arid Regions of Zimbabwe: Case of Buhera District

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Abstract

One of the major challenges to enhance food security amongst rural populations in developing countries including Zimbabwe is the continued existence of high postharvest losses, accompanied by low yields due to climate change, among other factors. It therefore becomes imperative to investigate the level of adoption and utilization of ethno-postharvest technologies in a bid to evaluate their strengths and weaknesses to safeguard yields before consumption. Data was collected in Buhera district through triangulation, which involved semi-structured interviews with five elderly people snowball sampled and purposively chosen Agritex officers as well as questionnaires administered to 100 purposively selected smallholder farmers. Crops and technology observations during fieldwork also constituted an important component of the data gathering techniques. Research results show that although some long established and effective traditional methods like “tsapi” were abandoned, there are some residual traditional technologies still in use such as drying on “ruware”, threshing of small grains by cattle trampling and storing all crops in a traditional hut called “hozi” with the aid of pest repellents like cactus ash. Major factors leading to the demise of most traditional technologies include the absence of suitable education and information dissemination structures and competition from vigorously promoted western methods among others. It was concluded that in order to effectively minimize postharvest losses, indigenous technologies must be studied, documented and promoted by both practitioners and external agencies such as Agritex, and non-governmental organizations. Where possible, they can be augmented by modern day technologies to reduce the costs of post harvest storage for marginalized and poorly resourced smallholder farmers in the area.