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Determining the Sustainability of Utilisation of Low External Input Postharvest Handling Practices in the Commercial Production of Common Beans in Kyotera County, Rakai District

The study was to identify and determine the effectiveness and level of awareness of use of low external input post-harvest handling practices that can sustainably be used in commercial production of common beans. It was conducted basing on the importance of the common beans to the people in the low developing countries as a major source of protein and calories. And, the very poor post-harvest handling that was estimated at a loss of 40% in Uganda challenges Beans. It was a survey research conducted in Kyotera County, Rakai district (Uganda). Two sub-counties, two parishes per selected sub-county and one village per the selected parish were randomly selected using purposive sampling. Sample size of eighty respondents was obtained using Slovin's formula. The data were collected using two research instrument tools; structured interview and observation check list and it was analysed using the Statistical Package for the Social Sciences (SPSS) computer programme. The results of the study indicated that constant sun drying, use of chilies (C*apsicum frutescens*) and cedro (*cupressus lusitanica*) are the most used and effective low external input post-harvest handling practices for sustainable commercial production of beans. Other low external input postharvest handling technologies for storage of beans found, known, and used by commercial farmers were; wood ash, *Tephrosia spp*, soil dust, marigold (*Tagetes spp*), banana juice, honey, tobacco (*Nicotianaspp*), storing beans with chaff, ant-hill soils, cow dung ash, wild basil (*Ocinum spp*), onions and Neem. Farmers were obtaining bean postharvest handling information from fellow farmers (friends), extension workers, parents and buyers. The study recommended a combination of chilies, cedro leaves and constant sun drying as the best cost effective and environmentally safe alternative for commercial bean farmers to preserve produce for a long period not less than three months.

Key words: Post harvest, Commercial, Beans, Production