

**Christopher Alex Msongore**

**Profitability Analysis of Maize Storage Technologies in Tanzania: A Case of Babati District**

**Abstract**

Maize is the principal food crop produced in most regions in Tanzania, including the Manyara region. The study was designed to assess the profitability of maize storage technologies used by farmers in Babati District. The objectives were to document different maize storage technologies; the cost effectiveness of alternative maize storage technologies, and the financial costs and benefits related to different maize storage technologies. The data were collected randomly from 60 smallholder farmers from the villages of *Sabilo*, *Seloto* and *Long*. In this study, the Cost Effective Analysis (CEA) was used to determine the effectiveness of using different maize storage technologies in reducing post-harvest losses. Gross Margin and the Benefit Cost ratio were used to estimate the financial costs and benefits of using different maize storage technologies. The study found that different maize storage technologies, such as bags, traditional cribs, cribs with chemicals, in-house storage, bags with chemicals and new, improved, imported technologies, such as Super Grain bags were used by smallholder farmers. Data show that the use of super grain bags reduced maize losses less compared to other storage technologies, such as bags with chemicals, in-house storage and traditional cribs with chemicals. Despite the use of these storage technologies, farmers still experience pest attacks which reduce the quality of maize and contribute to weight loss. Data from this study are helpful in deciding how to address this problem. They suggest that small holder farmers continue to use bags with chemicals and in-house facilities to store maize. They also suggest that extension programs for small holder farmers give greater emphasis to the process of maize storage in order to reduce maize losses.