

Factors influencing storage of seed potato among Smallholder Agri-enterprises in Nakuru County, Kenya

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Summary

Despite the economic and nutrition importance of potato in Kenya, its production has been declining at 11% annually. Inadequate supply, inaccessibility of certified seeds and post-harvest losses are major constraints to development of the seed potato value chain. The losses that contribute to seed wastage and thus low supply include physical damage such as rotting and consequently low prices due to poorly stored seed potato quality. In 2014, Kaguongo *et al* found out that storage losses amount to 83.9% of the total post-harvest losses. Seed-potato storage is an important factor in ensuring stable potato production for combating hunger and improving seed potato agro-enterprise incomes. The objective of this study is to evaluate factors affecting storage of seed potato among smallholder farmers in Nakuru. Purposive selection with help of Sub-county agricultural officers (SCAO) was used to identify Njoro and Sirikwa North sub-counties for this study. A sample of 175 potato farmers were interviewed using cross-sectional survey and structured questionnaires. The sample comprised of 56 from Mau Narok, 32 from Mauche, 32 from Sirikwa and 55 from Kamara wards. Cross-sectional survey was done using semi-structured questionnaires. Statistical Package for Social Sciences (SPSS) version 20 and Stata version 13 software were used for descriptive and econometric analysis respectively. Descriptive statistics results showed that a store allowing diffused light (37.5%) and stores with earthen floor (35.3%) were the most preferred seed potato storage facilities among the farmers. Probit regression analysis was done on a sample of 59 farmers who grew seed potato, based on whether they stored or did not store their seed. Location of the farmer, years growing seed potato, growing seed potato for income, strict regulation in seed growing, cost of seed and use of certified seeds variables were the explanatory variables. It was identified that if a farmer came from Njoro, it significantly increased the probability ($p=0.05$) of storing seed potato. Growing seed for income ($p=0.09$), use of certified seed ($p=0.04$), years in seed potato growing ($p=0.00$) significantly reduced the probability of storing seed. The results suggest that there is a high demand for seed potato given the small proportion of seed growers and a number who did not store their seed. This indicates existence of entrepreneurial opportunities that agripreneurs with support from stakeholders like research and seed grower farms can exploit. It is recommended that further study to determine the costs of investing in seed potato storage facilities be undertaken.