Post-harvest constraints of solanaceae species produced in Kabare wetlands, eastern Democratic Republic of Congo

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Abstract

The Kabare territory wetlands produced a significant quantity of solanaceous crops (potato, tomato and eggplant, etc.). One of the observations is the fact that significant losses are being observed during production and mostly after harvesting. The objective of this study was to assess the post-harvest constraints of the main solanaceous crops grown in these wetlands. A survey was carried out among 225 randomly selected households from four wetlands that lied down six districts to characterize the producers, identify the post-harvest techniques used and the constraints observed. Samples of solanaceous products were preserved for 15 days according to the local preservation techniques used to evaluate their effectiveness. The results showed that the producers face numerous post-harvest constraints of three types: structural, technical, and technological. These constraints a varied from value chain actor group to another. Most of the methods used by producers were mostly classified as moderately effective, and did not allow the quality of the products to be preserved, while quantitative losses remained very significant high. Besides, other external factors such as environmental and socio-economic factors contributed significantly also to these losses. Much losses are observed on tomato than on potato and eggplant; only a few preservation methods were classified as effective, notably tuber sorting (– 60%), the use of ice cubes (– 65%), and the use of pesticides (– 70%). Methods such as spreading out in a corner of the house (60%) and storage in the bag (50%) were classified as less effective for more than half by the farmers. Although suffering significant losses, these solanaceous crops provided important household income and thus contributed to food security in the area. Crop production and preservation have to be improved while effective production practices in Kabare and South-Kivu wetlands, eastern of DR Congo, have to be implemented.