

## **Post-harvest loss surveillance of fresh horticultural food crops at retail market level in Tanzania - a tool for food and nutrition security planning**

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A survey was carried out in selected retail markets in Tanzania to assess postharvest loss of horticultural food crops at this level. The survey involved gathering information on the kind of commodities available in each market, their source, main causes of postharvest loss and measures taken by retailers to reduce postharvest loss. The markets surveyed were in Morogoro, Dodoma and Dar-es-Salaam regions. A structured questionnaire was used to collect the information. In all the markets surveyed, only a few retailers were selling more than four commodities. Majority of produce in the markets came from the Southern and Northern Highlands and Central Eastern Zone. The extent of postharvest loss was commodity-, location-market and retailer-specific. The targeted clientele also seemed to influence postharvest loss. The main causes of postharvest loss were found to be: injuries induced during harvesting and/or transportation over rough roads, lack of knowledge in postharvest preservation technologies, high temperatures leading to accelerated ripening of fruits and wilting of vegetables, poor harvesting methods, lack of maturity/quality indices and poor management and organization of some markets. Shading and sprinkling of commodities with water were the most common precautionary measures taken by majority of the retailers to reduce product deterioration and hence postharvest loss. Although modified atmosphere packaging was practiced in the retail markets in Dodoma Municipality, the objectives of its use in most cases were not for extension of the commodity shelf life. Simple food preservation techniques such as sun-drying were not being practiced in any of the markets but the majority of respondents were eager to learn and practice such preservation methods. The data indicate that postharvest loss of horticultural food crops in Tanzania is quite high and needs to be given priority in government policies rather than enhancing crop production. There is need for intervention and outreach programmes encompassing all stakeholders and disciplines in this important sector whose aims will be to reduce postharvest losses, improve marketing efficiency, improve interdisciplinary interaction and improve nutritional status through enhanced availability horticultural food crops. The information presented here, though not exhaustive, should serve as a useful guide in formulating appropriate adaptive applied agricultural research programmes and policies in Tanzania and other countries in the region geared towards poverty alleviation.