Tropentag, September 9-11, 2020, virtual conference

"Food and nutrition security and its resilience to global crises"

Backyard Gardening Innovations: Towards Enhanced Vegetable Consumption for Nutritional Security among Urban and Peri-Urban Dwellers in Central Uganda

Losira Nasirumbi Sanya, Damalie Babirye Magala, Immaculate Ojara Mugisa, Teopista Namirimu, Robert Mutyaba, Monica Muyinda, Beatrice Omounuk Akello

National Agricultural Research Organisation (NARO), Mukono Zonal Agricultural Research and Development Institute (MUZARDI), Uganda

Abstract

Globally, food and nutrition security remains a challenge especially among the urban poor. With rapid urbanisation amidst high levels of unemployment or underemployment, the urban poor are at a risk of experiencing malnutrition. Studies show that regular consumption of indigenous vegetables can meet nutritional requirements in the human diet thus, strategic interventions for increasing vegetable consumption are critical to address micronutrient deficiency. However, land availability for vegetable production remain a limiting factor among urban and peri-urban (UAP) dwellers in central Uganda. From 2012 – 2017, NARO promoted backyard gardening innovations (BGIs) to enhance production, consumption and marketing of vegetables in UAP areas of central Uganda. This study examined the uptake of BGIs and their subsequent contribution to enhanced vegetable consumption among UAP dwellers in the project sites. A multistage sampling technique was used to select a random sample of 104 beneficiaries. Data were collected using a pretested semi-structured questionnaire in a beneficiary survey and sex-disaggregated focus group discussions. Qualitative data was analysed using narrative and thematic techniques while quantitative data was analysed using descriptive and inferential statistics. The results show that 98 % of the respondents adopted at least one of the innovations promoted. Recycled bags (68.0 %) and raised beds (67.7 %) were the most commonly adopted BGIs while food towers (42 %), wooden boxes (35 %) and greenhouses (4.1 %) were the least used. These innovations promoted diversified production with specific techniques being considered suitable for specific or combinations of vegetables. Tomatoes, *Solanum aethopicum* and onions were the commonly grown crops using BGIs. The choice of crops could be a reflection of farmers diverse needs hence targeting crops that meet food, nutrition and income needs. Overall, majority (98 %) of the beneficiaries reported an increase in consumption of vegetables. UAP dwellers need to be empowered to innovatively use locally available materials as a strategy to reduce the cost involved and bolster the benefits. Further research should focus on the cost-benefit analysis of different BGIs and optimal vegetable intercropping combinations based on the existing production systems to enhance their uptake for food, nutrition and income security.

Keywords: Backyard gardens, Central Uganda, innovations, urban and peri-urban, vegetables consumption

Contact Address: Losira Nasirumbi Sanya, National Agricultural Research Organisation (NARO), Directorate of Research Coordination, Plot 11-13 Lugard Avenue, P.O. Box 295, Entebbe - Uganda, +256 Entebbe, Uganda, e-mail: losirasfm@gmail.com