

ROLE OF HOME GARDENING IN ENHANCING FOOD SECURITY AND ECONOMIC RESILIENCE IN WOMEN-LED FARMING COMMUNITIES: A CASE STUDY

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Despite the prevalence of home gardening (HG), its specific contributions remain unevaluated. Hence, this study assessed the impact of HG on food security and economic resilience in *Viharapalugama*, a region facing fluctuating agricultural incomes and rising food prices. The study compared income, food access, dietary diversity, and food expenditure proportions among HG households (HGs) and non-HG households (NHGs). Primary data were collected during the late *Yala* season from 50 randomly selected households per category using a structured questionnaire. Household food security was assessed using the Household Dietary Diversity Score (HDDS) for its simplicity and reliability in reflecting dietary quality. The Kruskal-Wallis test, descriptive statistics and t-test were used for data analyses. Results showed a significant monthly income difference ($p=0.000$) between HGs and NHGs which recorded LKR 74,000.00 and LKR 55,160.00 respectively. Both groups had high food security, with similar mean HDDS scores (HGs: 8.54, NHGs: 8.88, $p=0.202$, 95% CI: -0.865 to 0.185), likely due to comparable access to diverse foods and nutrition knowledge. HGs showed distinct benefits, including reduced food expenditure and contributing up to 40% of daily food intake, especially vegetables and green leaves. Preservation methods like drying (16%) and pickling (14%) added dietary stability. While HDDS scores were similar, qualitative insights highlight HG's role in enhancing economic resilience by reducing market dependence, making it a viable strategy for improving food security and economic resilience. The findings are specific to this region and limited by the small sample size of 100 families. Caution is advised when applying these results to other contexts, as socioeconomic, cultural, and environmental factors may differ. Policy recommendations include providing microfinance and subsidies, training through field schools and digital platforms, establishing resource centres, collaborating with NGOs and the private sector, and offering gender-responsive support for women farmers.

Keywords: Economic resilience, Food access and availability, Home gardening, Household dietary diversity score, Women-based farming community