

## Abstract

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# Exploring the link between home gardens and nutritional outcomes in rural Sri Lanka

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Household food production is considered a key avenue for improving food security and nutritional status, particularly for low-income people from developing countries. However, little is known about what aspects of home garden production enhance nutritional outcomes. This paper aims to assess how home gardens influence nutritional status while considering the impact of various child, maternal, and household characteristics such as birthweight, age, education, and income. We also examined the impact of distance to the market mediating this association. We conducted a cross-sectional study of 403 children (24–60 months) and their mothers (18–45 years) in Batticaloa district, Sri Lanka using a pre-tested structured questionnaire. Maternal and child anthropometric measures were taken, and children were classified as stunted, wasted and underweight based on the WHO references, and BMI was calculated for mothers<sup>(1)</sup>. Logistic regression was used to analyse the factors associated with the dependent variable, nutritional outcomes. Food production diversity was not associated with maternal or child nutritional outcomes. The only production variable associated with child nutritional outcome was livestock ownership, and it was negatively associated with child wasting ( $P < 0.01$ ). Surprisingly, increased market distance improved the child undernutrition ( $P < 0.05$ ). Higher levels of maternal education were significantly associated with reducing stunting and underweight in children ( $P < 0.01$ ). Childbirth weight showed a negative association with a child underweight ( $P < 0.01$ ), and we also observed a small negative effect of a child's age on stunting. These findings suggest that while home gardens can be an entry point, improving nutrition may require a multifaceted approach that addresses a broader range of factors.

**Keywords:** food production; livestock; nutrition; child; education

**Ethics Declaration:** Yes

## References

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