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"Solidarity in a competing world — fair use of resources"

An Agro-Climatic Zone Perspective of Factors Influencing Stunting among Children in Rural Tanzania

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Abstract

This paper uses household cross-sectional survey from a sample of 120 households from rural Dodoma and Morogoro regions in Tanzania to analyse factors influencing stunting in children residing in rural areas of differing agro-climatic conditions in Tanzania. Demographic, socioeconomic and mothers/caregivers' knowledge in nutrition and kitchen gardening information was collected using a semi structured questionnaire. Nutritional status was assessed by measuring the weight, height and haemoglobin level of children and their mothers or caregivers. The paper uses logistic regression models to establish relationships between stunting and multiple categorical variables. The study finds out that the prevalence of stunting and severe stunting in children was 41 % and 21 % respectively while 11 % of women had Body Mass Index of below 18.5. Results also indicate that 17 % and 16 % of children and women were anaemic respectively. Determinants of child stunting in Dodoma are sex and age of the child, duration of breastfeeding, household size, use of iodized salt and the distance to a water source. In Morogoro child's age, duration of breastfeeding, literacy status of mother and Body Mass Index of mother predict stunting. Evidence that factors causing malnutrition vary according to different agro-ecological conditions was clearly indicated in this study. Therefore, we conclude that agro-climatic variations somewhat predict the variation in child stunting. It is therefore recommended that nutrition interventions should not be too general but specific to various agro-climatic environments. Implementing agro-climatic sensitive well thought actions may help to reduce undernutrition and food insecurity in specific areas. There is also need to improve access to portable water: provision bore-wells that can provide drinking and household consumprion water to residents in areas whether there is a need of walking of 60 minutes or more to fetch water.

Keywords: Agro-climatic, anaemia, kitchen gardening, nutritional status, rural, stunting

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