

**‘The relationship between malnutrition and economic growth in Sylhet region of Bangladesh’**

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**Abstract**

This study explores the relationship between economic growth and child nutritional status, a persistent global problem, regarding human capital development and future economic prospects. Whereas economic growth is theoretically supposed to reduce malnutrition due to increased household incomes with consequent access to more nutritious foods, empirical evidence has been ambiguous in supporting such a hypothesis. It sets out to determine whether economic growth always leads to child malnutrition reduction or, in fact, whether the influence is more subtle and conditional for any given context and the subject of other influences. This association between economic growth, household expenditure on consumption, and child malnutrition, proxied with such established indicators as stunting, wasting, and underweight, has been analyzed using a, or in other words. The findings will hence provide insight into how well economic growth functions as a strategy in combatting child malnutrition, while informing targeted interventions aimed at improving child health and promoting sustainable development. This study also examines other possible factors that affect the relationship between economic growth and malnutrition, some of these are parental education and social prejudices. Grasping these complex interlinkages is vital to formulate an appropriate strategy in confronting child malnutrition and thus maximizing economic growth benefits among poor populations.

# Introduction

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At a larger scale, probably the world's most prevalent problem with major hindrance in human development and long-run economic growth would probably go to child malnutrition. Malnutrition normally means deficiencies in nutrition from one or more nutrients. It involves several forms of stunting, or low height-for-age; wasting, which pertains to low weight for height; underweight, defined as a state of low weight for age. Each factor causes some very serious impairment in both physical and cognitive development for a child. Widespread child malnutrition has far-reaching economic implications, in potentially lowering productivity, healthcare costs, and overall levels of economic growth. While the increase in Gross Domestic Product per capita has often been used to explain improvements in nutritional outcomes, no unidirectional and direct linkage exists between economic growth on the one hand and child malnutrition on the other. While economic growth may mean increased household incomes and thus arguably improve access to nutritionally valuable food as well as health care services, how the economic gain is distributed becomes an issue. Unequal distribution leads to increased inequalities and leaves behind those vulnerable populations, including children, who bear the continuous risks of malnutrition. Other factors such as access to clean water and sanitation, maternal education, and the quality of healthcare systems are also crucial determinants of child nutrition outcomes independent of economic growth.

# Literature Review

In Bangladesh, child and maternal malnutrition has been reduced, the prevalence of underweight (weight-for-age-z-score <-2) among children aged less than five years is still high. A study by Saha et al. (2008) investigated the association of household food security with infant feeding practices in rural Bangladesh. The data from 1,343 infants who took part in the Maternal and Infant Nutrition Intervention in MATLAB study were analysed. Their findings showed that HFS (Household Food Security) has an impact on IFP (Infant Feeding Practices), since higher HFS correlated with better IFP in the latter half of infancy but was associated with worse IFP during the first three to six months of life. Results also suggested that HFS affects the types of foods introduced as complements, since food secure households were more likely to introduce cow milk, fruit juice, and other liquids earlier than foodinsecure households. There is strong evidence that HFS is a key determinant of IFP even in settings where breastfeeding is common and sustained for a long duration (Saha et al., 2008). They recommended that interventions aiming to promote good infant feeding practices should target mothers in food-secure households during the first three to six months of life and mothers in food-insecure households during the second half of infancy.

Ahmed et al. (1998) found that the dietary pattern and nutritional status of adolescent girls attending high schools (10-16 years) in Dhaka city and to examine the association with various social factors by Cross-sectional study. Girls from families whose parents had less education had a greater tendency to be thin and short for their age, while girls with lower incomes and less-educated parents showed a dietary pattern that was poor in relation to eggs, milk, meat, and fruits, with reduced intakes of protein, fat, and riboflavin. Their study insinuates that the diets of these girls were generally deficient in both macro and micronutrients, which could have severe health consequences.

Manikem et al. (2017) found on a different study that introduction of Complementary Feeding (CF) was assessed as the proportion of infants aged 6–8 months who received solid, semisolid or soft foods. Three cohort, 30 cross sectional and 3 mixed methods studies were included in this study. Most studies revealed suboptimal CF practices despite adopting the WHO, IYCF Guidelines. They showed that timely initiation of CF practices ranged from 24 to 83%, achieved minimum dietary diversity from 25% to 44%, and minimum meal frequency from 33% to 81%. Influencing factors included maternal education, poor knowledge of CF practices and socioeconomic variables.

Salem et al. (2022) showed through association analysis between individual, household and maternal factors and the consumption prevalence of sugar-added foods in children aged 6 to 24 months. Results through multi-step multistage sampling; The diet recall questionnaire was analyzed using multivariate logistic models while conducting heterogeneity tests among participating sites. Nearly two-thirds of the children aged 6 to 24 months in rural Chatmohar, Bangladesh, had consumed sugar-sweetened food on the previous day, which is quite high and an alarming prevalence. The associated factors detected in this study need further investigation to pinpoint possible areas of intervention for reducing child sugar. A higher prevalence of child sugar-sweetened food consumption is associated with both a higher DDC (Child Dietary Diversity) and a higher prevalence of maternal sugar-sweetened food consumption. At greater levels of maternal nutrition knowledge and wealth, more household income was associated with less child sugar sweetened consumption in Bangladesh (Salem et al.,2022).

In the work of Vollemer et al. (2014), analysis is drawn on the relationship between economic growth and early childhood undernutrition as obtained from data in 121 DHS in 36 low and middle-income countries. In most studies, changes in GDP per head yielded quantitatively very small to null association with reducing stunting, underweight, and wasting among children aged 0-35 months. Therefore, the authors conclude that economic growth is not adequate for child nutrition improvement and direct investment in health and nutrition is extremely important to face the global challenge. They also placed emphases on vaccination, clean water, sanitation, and pre and postnatal cares as crucial public service investments for improvement in child nutrition in the low-income setting. Their findings contradicted the presumption that, with economic growth, there is an automatic reduction in child undernutrition and how specific targeted interventions and policy changes can bring improvement in child nutrition.

Harold et al. (2003) studied the impact of malnutrition on individuals throughout their life cycles. Malnutrition in developing countries is one of the major health problems and has serious implications for individuals and the economy. They started analysing the various indicators used to assess malnutrition and its roots further explored the microeconomic evidence of how malnutrition affects productivity. Improved nutrition can benefit individuals through several channels, including increased cognitive development, physical stature and strength and educational attainment (Harold et al.,2003). Lastly, they labelled malnutrition as a costly problem for developing countries. Moreover, they preserved the potential benefits of nutritional policy interventions, defending that such interventions can be both pro-poor and pro-efficiency.

# Methodology

This section details the methodological approach employed to investigate the relationship between child malnutrition and economic growth in Sylhet region of Bangladesh.

**Data Sources:** This study will be done taking Sylhet division as its population.

The study aims for quantitative research approach to answer its objective that is either the economic growth can be successful in reducing children undernourishment in Sylhet or not.

**Variables:**

Dependent Variables: The primary dependent variables are indicators of child malnutrition, including Stunting: Measured as height-for-age z-scores, reflecting chronic malnutrition. Wasting: Measured as weight-for-height z-scores, indicating acute malnutrition. Underweight: Measured as weight for-age z-scores, representing a composite measure of both chronic and acute malnutrition.

Independent Variable: The primary independent variable is economic growth, measured as: household income: measured as household consumption expenditure per month

Alongside with seeing, the impact of increased income on child nourishment, this study aims to test these hypotheses.

H01: Parental education timespan has a significant part to play in different diets across the children of same age.

H02: Sociocultural prejudices are playing significant role in children’s diets.

H03. The availability of clean water and healthcare institutions have indispensable impacts upon children’s health.

This follow-up hypothesis delve deeper into the initial question's succeeding percentage.

**Timespan**

6 months.

# Conclusion

This study has tried to investigate the complex relationship between child malnutrition and economic growth. Hence yields good understanding in the efficacy of using economic growth as a proper strategy in this never-fading global problem of malnutrition. These findings will briefly affirm if there is a statistically significant negative association between economic growth and child malnutrition, meaning that higher levels of economic growth are associated with reduced rates of stunting, wasting, and underweight. However, it also warns of the contextual factors and distribution of economic gains. This paper, therefore, places its emphasis on the role of targeted interventions beyond the aim of the advocacy of economic growth. As much as this can indeed provide an enabling environment that allows for an improvement in nutritional outcomes, it is no panacea. Nutritious food, clean water and proper sanitation need to be supported by complementary policies that prioritise investments in health and education, both of which are essential for maximizing the benefits of economic growth on child health. Further, income inequalities could be reduced and social safety nets reinforced to help the trickling down of economic growth to the most vulnerable sections, which include children prone to malnutrition. These findings have implications for policy and practice operating at the interplay between child malnutrition and sustainable development. If the interaction of economic growth with child nutrition is adequately understood, then that could go a long way toward targeting interventions at improving child health and developing a quality workforce that is pivotal to fostering long-term economic prosperity. More research is required on the specific mechanisms by which economic growth affects child malnutrition and the ways in which economic growth can be best translated into improved nutritional outcomes for children at different levels. This research adds to the growing body of evidence that points out the need for a multi-sectoral approach to child malnutrition-add targeted interventions aimed at more basic causes of child health and welfare to economic growth strategies.

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