

Addressing the Poor Nutrition of Ugandan Children

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In 2011, 33 percent of children aged less than five years were malnourished.



Source: FANT2

Executive Statement

One out of every three young children in Uganda are short for their age, according to the 2011 Uganda Demographic and Health Survey (UDHS); and the incidence of poor nutritional status is highest in the relatively better off sub region of South Western Uganda.

Although poor child nutrition status is a pervasive global problem, it is mainly concentrated in a few developing countries. According to the United Nations Children's Fund (UNICEF) 24 developing countries account for over 80 percent of the world's 195 million children faced with stunting. Out of the 24 countries, at least 11 are from Sub Saharan Africa (SSA). Furthermore, countries in SSA have made the least progress in reducing stunting rates—from 38% to 34% between 1990 and 2008—compared to a reduction of 40% to 29% for all developing countries. Uganda is among the developing countries with the largest population of stunted children—an estimated 2.4 million children aged less than 5 years in Uganda are stunted and this places the country at the rank of 14th—based on the ranking of countries with large populations of nutritionally challenged children.¹

Issues of maternal and child nutrition have been central to Uganda's human development agenda. In 1999, the Government of Uganda (GoU) introduced a five year revolving Health Sector Strategic Plan (HSSP-I) whose objectives included the reduction of stunting rates from 38 % to 28% among children aged 5 years and below. In addition, the plan sought to provide a nationwide community growth promotion system.² In terms of actual indicators, the current HSSP III (2010-2015) intends to

reduce stunting prevalence rate to 32 % by the end of 2015. In order to meet some of the above objectives, the GoU produced the Uganda Nutrition Action Plan 2011-2016 that outlines the various ways of dealing with malnutrition in a multi-sectoral environment.

Introduction

This brief provides evidence on the drivers of poor nutritional status among infants during 1995-2006. Despite Uganda achieving some progress in improving overall welfare status, the country is still far from achieving the goal of improved child nutrition status. This brief shows how the determinants of child malnutrition have changed overtime in Uganda during the 1995-2006 period. The analysis is based on the three most recent Demographic and Health Surveys conducted by the Uganda Bureau of Statistics and Macro International—the 1995, 2000/2001 and 2006 Uganda Demographic and Health Household Surveys (UDHS).³ These surveys were part of global effort, supported by the United States Government, to monitor and evaluate population, health and nutrition programs in developing countries at intervals of five years.

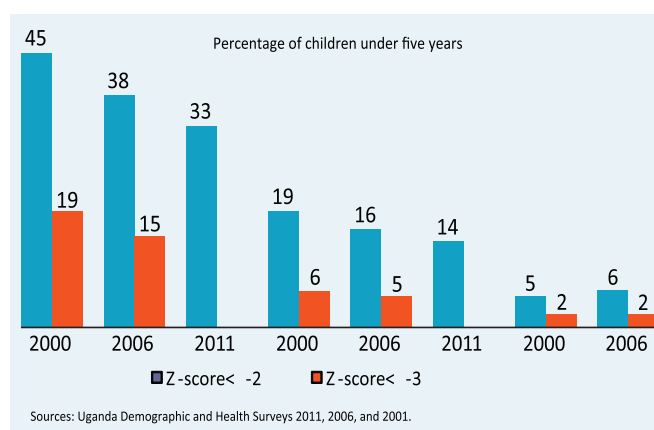
The surveys were nationally representative covering: 8,093 households in 1995; 8,531 households in 2000/01 and 9,864 households in 2006. For all children aged less than 5 years, the surveys report standard anthropometric measures such as height for age. We selected children's anthropometric indicators as our measure of health status because they reflect any sustained experience of food deprivation and untreated illnesses.⁴

Malnutrition is widespread

Malnutrition is widespread in Uganda, but generally declining. The proportion of children aged below 5 years classified as stunted declined from 38% in 2006 to 33% by 2011 (Figure 1). Overall, the figure shows that Uganda has registered mixed progress regarding child nutritional health indicators. Furthermore, the trends suggest that Uganda might not be able to achieve 50 percent reduction in these indicators by 2015. Finally, despite the commendable progress in reducing child stunting rates, the progress is relatively much slower than that recorded for the decline in income poverty. In particular, the incidence of poverty in Uganda reduced from 56 percent in 1992/93 to 24 percent by 2009/10 while the population of poor persons declined by 20 percent—from 9.6 million persons in 1992/93 to 7.5 million by 2009/10.⁵ Overall, the situation suggest that

improvements in welfare status alone or increase in public spending on health may not be able to improve overall child nutrition status or reduce inequalities in Uganda.

Figure 1: Extent of poor nutritional status in Uganda, 2001-2011



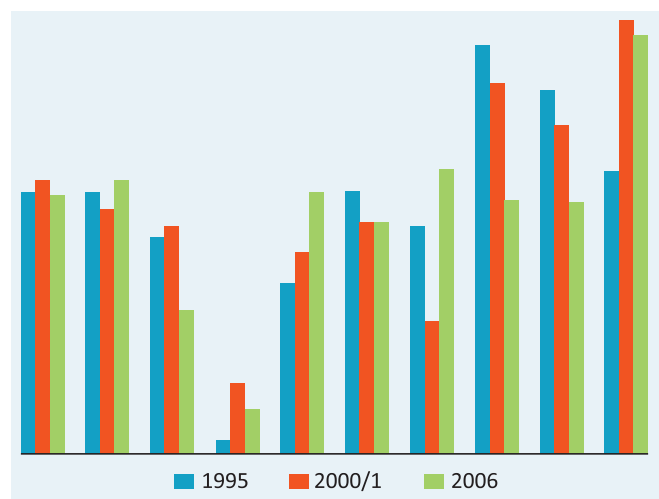
Nonetheless, there are wide divergences in stunting rates by sub regions. For instance, in 2006, only 22 % of children in Kampala (the capital city) were stunted while the corresponding rates for South Western Uganda were 49.6 %. Such differences can only be minimally attributed to income. In 2006, the sub-region with highest stunting rates (South Western Uganda) had a much lower incidence of poverty than for example North or West Nile sub regions.

Analysis showed that educational attainment, also significantly boosted children's health status. Furthermore, the results showed that increased maternal education has a large payoff. In particular, the impacts of completing secondary schooling on anthropometric scores are in most cases more than double the impacts for completing primary schooling.

The study also examined whether community effects are important in explaining child health status. The analysis showed that community fixed effects are very significant. Specifically, the importance of maternal education reduces considerably after considering community fixed effects. This particular result suggests that individual education matters more than community knowledge in improving child health status. However, community effects have no impact on income

variable. This suggests that wealthier, better equipped communities do not produce better health outcomes.

Figure 2: Trends in child stunting by sub-region (%)



Another issue examined was whether there are non-linearity relationships between child health status and other exogenous variables. We examined whether maternal education attainment and household wealth status are substitutes. In addition, we also included interaction terms of gender of the child with household wealth status to establish any gender differences in allocating child health resources. The analysis showed that household wealth status was less important for households with mothers who have higher education attainment. On the other hand, there were no significant effects of income on health of children by gender.

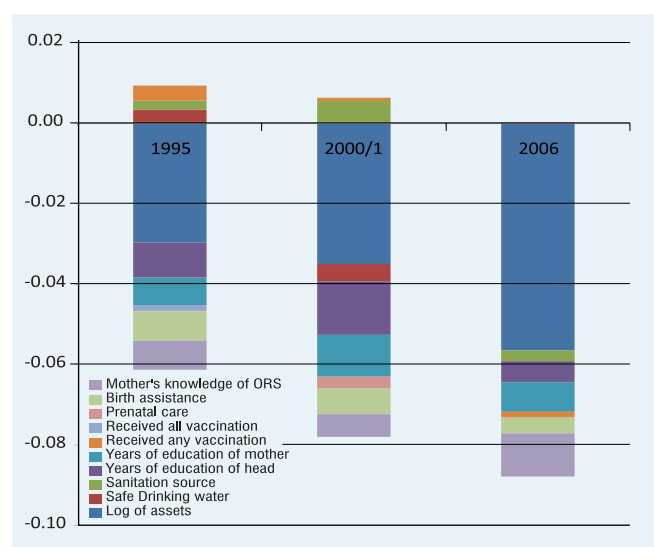
What drives inequalities in child health status?

As earlier mentioned, the study also examined the causes of nutritional inequalities using decomposition methods. The results for the three survey rounds are presented in Figure 3. Results indicate that overall inequality is negative and worsening over time – high concentration among children in poor households. Mother's education explains between 9-16 percent of the observed stunting inequalities but declining overtime. Indeed, increasing improvements in the girl's education might be explaining this finding.

The indicator of household welfare status is by far the most important variable explaining stunting inequality

in range of 50-70percent. Taking 2006, if disparities in wealth indicator were to be addressed, inequality in child stunting would fall by 70%. Given that a high inequality in material wellbeing has such a large impact on child's stunting, this suggests that putting in place only appropriate health policies would not address the challenge of poor child nutritional health status.

Figure 3: Drivers of inequalities in child nutritional status, 1995-2006



Furthermore, (Figure 3) shows that geographical location explained between 9-13 percent of the observed inequality in nutritional status. As such, the contribution of sub-regions to nutritional status appears lower than that observed for material wealth indicator and maternal education. In the recent past, the GoU's efforts to address social inequalities have focused more on geographical targeting; this finding seems to suggest that there is need to focus on households based on their socio-economic (material well being and maternal education, for instance) than on only their location.

Emerging policy issues

The failure to translate the impressive macroeconomic performance, increased funding to the health sector, and improvements in welfare and overall improvement in growth in consumption, into corresponding changes in social outcomes e.g. in health remains a major policy concern. The growing social and economic inequality as cited in National Development Plan (NDP) is real but

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with limited evidence based analysis to inform policy processes.

Maternal education impacts on the level and distribution of stunting. The government emphasis on Universal Secondary Education (USE) is in the right direction however, it must benefit the girls in poorer households. Although Uganda has attained relative success in increasing female enrolment in primary school under UPE, similar success is yet to be registered for secondary schooling despite the introduction of the universal secondary education in 2007. Unlike, UPE, USE is not free to every UPE graduate. The USE program is means tested based on performance on primary leaving examinations. Without increasing female education beyond primary education, Uganda is unlikely to register significant changes in child health status. In addition, there is need to refocus attention on the stagnation in primary enrolment rates since 2000.

Material well being indicator has the most important impact on inequality of stunting. This suggests that increasing income inequalities will fuel increasing stunting inequalities. A key implication of our findings on child health is that one cannot overstate the importance of household incomes—even in an environment of free public health services that exists in Uganda today.

Finally, if the government decides to continue with its current geographical targeting, the targeting needs to combine it with households targeting based on material wellbeing and maternal education among other factors. Indeed, focusing on public health policies without taking into account these other factors might not address the child stunting problem.

Endnotes

- 1 UNICEF (2009) Tracking Progress on Child and Maternal Nutrition: A survival and development priority. New York, UNICEF.
- 2 Such community level interventions promote and provide services such as: exclusively breast feeding, inoculations, Vitamins supplementation and de-worming medicine.
- 3 UBOS and Macro International Inc (2007) Uganda Demographic and Health Survey 2006 Calverton, Maryland: UBOS and Macro International Inc.
- 4 Keller, W. (1983) “Choices of indicators of nutritional status. Evaluation of nutrition in third world communities”, Nestle Foundation Publication Series (Bern: H. Huber) Vol. 3, pp. 101-113.; Martorell, R. and J. P. Habicht (1986) “Growth in Early Childhood in Developing Countries”, in Rank Fulkner and J. M. Tanner (ed.), Human Growth: A Comprehensive Treatise (New York: Plenum).
- 5 Uganda Bureau of Statistics (2010) Uganda National Household Survey 2009/10: socio-Economic Module Abridged Report (Kampala: UBOS)

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