

Prioritising Nutrition in Order to Achieve the Millennium Development Goals in India



Malnutrition causes long-term damage to children’s development, with huge social and economic costs. It affects not only children’s physical development but also their cognitive development, so reducing future productivity and leading ultimately to economic loss for the nation as a whole. India has recorded strong economic growth in recent years but has shown little progress in tackling malnutrition. It is evident that economic growth alone will not solve the malnutrition problem and sustaining growth will require human capital development. Young Lives research suggests that there has been very little improvement over the last decade in children’s nutritional status and demonstrates the impact of malnutrition on children’s later development. Strengthening services and social protection schemes such as Integrated Child Development Services, the Public Distribution System and the Midday Meal Scheme are important elements of securing better nutrition for children and will support progress towards the Millennium Development Goals.

Malnutrition is a major concern in India. Despite considerable recent economic growth, very little progress has been made in improving nutrition. Malnutrition in general and micronutrient deficiencies in particular has a high economic cost. Productivity losses caused by malnutrition are estimated to be more than 10 per cent of lifetime earnings for individuals, and 2–3 per cent of GDP to the nation. The cost of treating malnutrition is 27 times higher than the investment required for its prevention (Administrative Staff College of India 1997). Malnutrition and its effects also undermine progress towards the Millennium Development Goals (MDGs). This Policy Brief considers evidence from the Young Lives study of childhood poverty, which has been collecting information since 2002 on 3,000 children growing up in Andhra Pradesh. Table 1 outlines the detrimental effects of malnutrition on six of the MDGs.

Table 1: Impact of malnutrition on progress towards selected MDGs

MDG	Impact of malnutrition
Goal 1: Eradicate extreme poverty and hunger	Malnutrition erodes human capital through irreversible effects on cognitive and physical development, thereby making it even more difficult for very poor people to change their situation. Around 75 per cent of the population currently consumes less than the recommended number of calories a day (2,100–2,400), which means that India is unlikely to achieve this goal by 2015.
Goal 2: Achieve universal primary education	Malnutrition affects the chances that a child will go to school, stay in school and perform well.
Goal 3: Promote gender equality and empower women	Anti-female biases in access to food may result in malnutrition, possibly reducing women’s access to jobs and positions of influence.
Goal 4: Reduce child mortality	Malnutrition is directly or indirectly associated with many child deaths, and it is the main contributor to the burden of disease in developing countries.
Goal 5: Improve maternal health	Maternal health is compromised by malnutrition, which is associated with most major risk factors for maternal mortality. Maternal stunting and iron and iodine deficiency in particular cause serious problems.
Goal 6: Combat HIV/AIDS, malaria and other diseases	Malnutrition increases people’s vulnerability to diseases such as tuberculosis and malaria, as well as their ability to recover. It may also increase the risk of HIV transmission and hasten the onset of full-blown AIDS.

Source: Adapted from World Bank (2006)

Malnutrition in an era of high growth

Analysis of Young Lives data offers a number of challenges to prevailing assumptions about orphans and vulnerability.

- Despite its high rate of economic growth, India is home to the largest number of malnourished children in any one country in the world.
- Malnutrition has long-term consequences for children. Stunting caused by malnutrition in early life is linked to many child development indicators (including literacy, self-confidence and educational aspirations).
- Young Lives research shows that the problem of stunting has become increasingly concentrated in the poorest households.
- High food prices can have both short- and long-term effects on children’s nutritional status. Government policies can buffer families from these shocks.
- Programmes such as the Public Distribution Scheme help ensure food security for families but need to be strengthened.

The causes of child malnutrition include children not getting enough food, repeated attacks of infectious diseases, inadequate access to safe drinking water and micronutrient deficiencies. Some common childcare practices also undermine good nutrition, including delaying starting breastfeeding after birth, not exclusively breastfeeding for the first five months, and irregular and insufficient complementary feeding between six months and two years of age. Malnutrition is also exacerbated by poor sanitation facilities, poor government childcare services, a lack of health education and the low priority assigned to primary healthcare in government programmes.

Malnutrition in India: the facts

India has a population of 1.21 billion of which:

- 37 per cent live below the national poverty line
- 42 per cent live on less than US\$1.25 per day
- 49 per cent of women are poor and
- 55 per cent of the population live with multiple deprivations as measured by the UNDP's Multidimensional Poverty Index.

The daily calorie consumption of the poorest 25 per cent of the population declined from 1,683 calories in 1987–8 to 1,624 calories in 2004–5, suggesting a concentration of malnutrition within the poorest households (Saxena 2006).

The National Family Health Survey 2005–6 (NFHS-3) survey highlighted widespread anaemia, with its prevalence actually increasing among children aged between 6 months and 5 years, from 74 per cent in 1998–9 (NFHS-2) to 79 per cent in 2005–6, with a higher percentage in rural compared with urban areas. Anaemia in women of reproductive age also increased from 52 per cent to 56 per cent over this same period.

India accounts for a large amount of the worldwide problems with malnutrition: worldwide, stunting (low height-for-age) is affecting roughly 195 million children under 5 years of age, of which one in three children (61 million) are from India. Similarly wasting (low weight-for-height) is affecting 71 million children worldwide of which 25 million are Indian. There are 129 million underweight children (with a low weight for their age) of which 54 million are in India. The high proportion of malnourished children, combined with its large population, has made India home to the largest number of stunted, wasted and underweight children in any one country in the world.

Though malnutrition affects people of all ages, the long-term development implications are more significant for younger children because most stunting starts in the first 1,000 days after conception. This has implications for early childhood care and accordingly India's primary policy response to child malnutrition begins with Integrated Child Development Services (ICDS), a nutrition and health programme with some non-formal education elements. ICDS has given more attention to increasing coverage but requires strengthening as it has largely neglected to improve the quality of service delivery; for example, not much attention is given to childcare practices and educating parents about how to improve nutritional intake within the family food budget.

Social protection mechanisms are also an important way to increase household access to food. The Public Distribution System (PDS) supplies essential commodities like rice, sugar, edible oil and kerosene at subsidised prices through a network of 'fair-price' shops. The Midday Meal Scheme (MDMS) entitles all children in primary and upper primary classes to a cooked meal of a set nutritional value. Household-level social protection measures such as the newly introduced Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) also have the capacity to improve households' ability to access sufficient food. MGNREGS is intended to provide a guarantee of up to 100 days work for those in rural areas, paid at a minimum wage level.

The Young Lives longitudinal study of child poverty being carried out in Andhra Pradesh examines this situation through close and regular observation of the lives of children and their families. Key findings from the study echo the outcomes of Indian national-level survey sources.

Persisting high levels of malnutrition, with least gain for the poorest households

In Andhra Pradesh Young Lives has been collecting data on 3,000 children and young people since 2002. The study is following two groups of children as they grow up: 1,000 children born in 1994–5 and 2,000 children born in 2000–1. Key findings highlight that around one in four (27 per cent) of the younger children were classified as thin (i.e. having a low Body Mass Index for their age) at the age of 8 in 2009, while almost one in three (29 per cent) were stunted. Comparing the older and younger children when they were both aged 8 suggests a very slight decline in stunting rates between 2002 and 2009, from 33 per cent to 29 per cent. These figures remain high despite the increases the Young Lives study has observed in consumption expenditure levels in line with economic growth. Moreover, where there have been improvements over time in stunting, this has been observed in children from less poor households, as illustrated by Figure 1, and not for those in poorer households. This suggests the problem of stunting has become increasingly concentrated in poorer families.

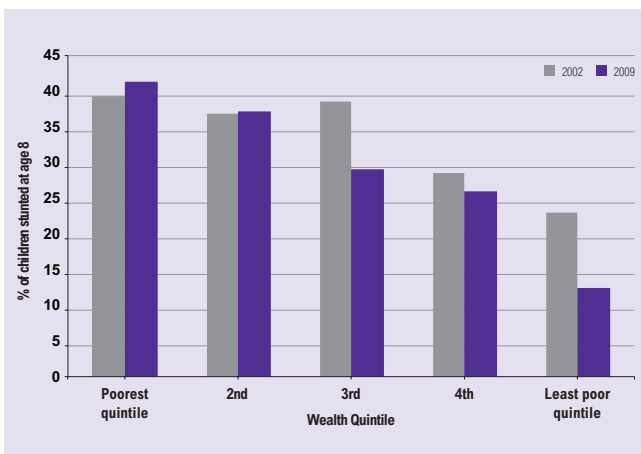
India's commitment to improving nutrition

Article 47 in the Constitution of India contains a commitment to improving nutrition: 'The State shall regard the raising of the level of the nutrition and the standard of living of its people and the improvement of public health among its primary duties'. Accordingly the National Nutrition Policy, which recognised the importance of National Nutrition Surveillance (NSS), was designed in 1993. It advocates coordinated action between food production, food distribution, education, health and family welfare, people with special needs and National Nutritional Surveillance.



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Figure 1. Changes in stunting rates, 2002–9, according to household wealth



Long-term impacts of early malnutrition

Poverty and stunting in children have a significant impact on children's learning and educational attainment. Young Lives data from Andhra Pradesh have also demonstrated the significant and long-term impacts of early life malnutrition on later development. Research finds that having a healthier height-for-age at the age of 2 can be expected to lead to an improvement in vocabulary test scores at 5 years old (Boo 2009). Other work demonstrates not only the link to cognitive outcomes but to broader 'psychosocial' indicators, showing that having a low height-for-age at the age of 8 is also associated with negative impacts on children's sense of self-efficacy (their confidence in themselves and trust in others) and educational aspirations at the age of 11–12 (Dercon and Sanchez 2011).

Food price increases and other shocks undermine nutrition

Young Lives data show that shocks such as rises in food prices are often experienced by poor families. Children can suffer long-term consequences from short-term shocks, such as drought and increases in the price of food. India, including Andhra Pradesh, has been affected by the global food price crisis. Young Lives data show that four in five households (77 per cent) reported significant increases in food prices between 2006 and 2009. High food prices will have an impact on children in two ways. The first is the immediate impact on family budgets, which could not only mean less food being available or cheaper food being purchased but also that there would be less funds for non-food items such as healthcare and education. Secondly, the situation could have a long-term impact on children's health, psychosocial well-being and educational achievements.

Quality of government services not always sufficient

Young Lives households have also given feedback on government programmes and services. Ninety per cent of Young Lives households have access to the PDS, which attempts to buffer families from food price increases. However, 30 per cent reported that the food was of poor quality, 23 per cent that the quantity was insufficient and 38 per cent that the supplies were irregular. The MDMS also acts as an important safety net, enabling 'catch-up growth' in stunted children. Young Lives data reveal that though drought has a significant negative impact on

children's nutritional status, policy can buffer this, with the positive effect of the MDMS protecting children and counterbalancing the negative impact of drought.

Policy implications to improve child nutrition

There is significant policy interest in nutrition and recognition of underperformance in this area. There is also a global recognition of how much of the world's malnutrition amongst children occurs in India, which, for a fast-growing middle-income economy, is a major concern. The 12th Five-Year Plan working group on nutrition have recommended that Nutrition Security for All should be the vision for the 12th Five-Year Plan; this would continue to position the development of children at its centre, would recognise nutrition as critical for child survival and proposes a multi-sectoral approach to address child malnutrition. Moreover, the proposed Food Security Bill will guarantee a right to food to all Indian citizens. Monitorable targets should be designed and included in the action plan at national level to ensure better results.

Being well nourished is the one of the rights of every child and the State has an obligation to ensure proper nutrition to all children irrespective of gender and ethnicity. Young Lives findings illustrate the short- and long-term negative effects of malnutrition on children and the important roles of the ICDS, PDS and MDMS. To meet national development targets, and achieve the MDGs, a more strategic, life-cycle approach that emphasises the importance of adequate nutrition in the early years is needed. India's public investment in nutrition is far below the required level and three key issues require immediate action: the scale, design and implementation of government programmes.

To improve food security, the quality of service delivery of the ICDS has to be strengthened. Along with providing supplementary food and pre-school education, the ICDS could focus on changing feeding practices and controlling infectious diseases. Investing in early childhood care and education (ECCE) has proven to be cost-effective and requires development of the skills of grassroots workers and a more effective management system. Strengthening the quality of implementation and monitoring referrals to healthcare systems are also key issues requiring immediate attention under ICDS. ECCE needs to be acknowledged as a fundamental right, alongside basic education for children over the age of 6.

Social protection schemes can also buffer households from the impacts of shocks. Improving the timely distribution and quality of food grains provided under the PDS would be one of the most effective ways of enhancing food security for children. Measures to reduce stunting and malnutrition also require improvements in the health and sanitation infrastructure. The effective functioning of wider social protection measures, such as the MGNREGS, can help reduce poverty and so also improve food security.

However, the Government has an immediate opportunity to improve the nutrition of Indian children, as draft 'right to food' legislation is currently before Parliament. Recent Supreme Court judgements that strengthen food rights for children should be incorporated into this legislation.

There is no doubt that India is achieving strong economic growth, but this alone has not been sufficient to address malnutrition among children. Rapid scaling-up of health, nutrition, education and infrastructure investments is needed to achieve the MDGs.

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For policy questions, please contact:

Vijay Kumar, Policy Coordinator, Young Lives India, Save the Children
Email: k.vijay@savethechildren.in
Tel: +91-40-23371180; +97 98490 35689 (Mobile).