The Costs of Undernutrition

- Over one-third of child deaths are due to undernutrition, mostly from increased severity of disease.
- Children who are undernourished between conception and age two are at high risk for impaired cognitive development, which adversely affects the country’s productivity and development.
- The economic costs of undernutrition include direct costs such as the increased burden on the health care system, and indirect costs of lost productivity.
- Childhood anemia alone is associated with a 2.5% drop in adult wages.

Where Does India Stand?

- 48% of children under the age of five are stunted, 43% are underweight, and 20% are wasted.
- More than 1 in 4 infants are born with a low birth weight.

As shown in Figure 1, although the overall prevalence of stunting and underweight has been decreasing over the past two decades, India will not meet MDG 1c (halving 1990 rates of child underweight by 2015) with business as usual.

**FIGURE 1** India’s Progress Toward MDG 1 is Insufficient

<table>
<thead>
<tr>
<th>Year</th>
<th>Stunting</th>
<th>Underweight</th>
<th>2015 MDG Underweight Target</th>
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<tbody>
<tr>
<td>1997</td>
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<td>2000</td>
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<td>2004</td>
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<td>2007</td>
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Source: WHO Global Database on Child Growth and Malnutrition using data from NFHS (figures based on the NCHS/WHO reference population)

As seen in Figure 2, India has higher stunting rates than some of its South Asian neighbors including those with lower income. India also has higher stunting rates than other poorer nations.

**FIGURE 2** India has Higher Rates of Stunting than many Neighbors and Income Peers

Most of the irreversible damage due to malnutrition in India happens during gestation and in the first 24 months of life.
Poor Infant Feeding Practices

- 1 in 4 newborns receive breast milk within one hour of birth.²
- Fewer than half (46%) of infants under six months are exclusively breastfed.³
- During the important transition period to a mix of breast milk and solid foods between six and nine months of age, just under half of infants (43%) are not fed appropriately with both breast milk and other foods.²

Solution: Support women and their families to practice optimal breastfeeding and ensure timely and adequate complementary feeding. Breast milk fulfills all nutritional needs of infants up to six months of age, boosts their immunity, and reduces exposure to infections.

High Disease Burden

- 1 in 5 child deaths are due to diarrhea.⁴
- Undernourished children have an increased risk of falling sick and greater severity of disease.
- Undernourished children who fall sick are much more likely to die from illness than well-nourished children.
- Parasitic infestation diverts nutrients from the body and can cause blood loss and anemia

Solution: Prevent and treat childhood infection and other disease. Hand-washing, deworming, zinc supplements during and after diarrhea, and continued feeding during illness are important.

Limited Access to Nutritious Food

- 1 in 4 households is food insecure.⁷
- Achieving food security means ensuring quality and continuity of food access, in addition to quantity, for all household members.
- Dietary diversity is essential for food security.

Solution: Involve multiple sectors including agriculture, education, transport, gender, the food industry, health and other sectors, to ensure that diverse, nutritious diets are available and accessible to all household members.

Low Status of Women

A central factor in malnutrition in India is the status of women. Low levels of education, early marriage and child bearing, inequitable power relations and inadequate knowledge of critical feeding and caring practices compromise the quality of child care.

Undernutrition is not just a problem of poverty. As Figure 3 shows, children are undernourished in one-quarter of even the richest households. This is not an issue of food access, but of caring practices and disease.

Vitamin and Mineral Deficiencies Cause Hidden Hunger

Although not be visible to the naked eye, vitamin and mineral deficiencies impact well-being in India.

- **Vitamin A:** 62% of preschool aged children and 16% of pregnant women are deficient in vitamin A.⁸
- **Iron:** Current rates of anemia among preschool aged children and pregnant women are 74% and 50%, respectively.⁹
- **Iodine:** While 1 in 2 households consume iodized salt, over 13 million infants remain unprotected from iodine deficiency disorders.⁹

World Bank Nutrition-Related Activities in India

Projects: The World Bank has supported efforts to improve nutrition in India since 1980 through six projects with an overall investment of over US$700 million. The ongoing US$360 million Second Reproductive and Child Health Project aims to reduce maternal and child mortality by increasing access to essential health services including nutrition. A new nutrition project under preparation will support strengthening the policy framework, systems and capacity of India’s flagship nutrition program ICDS, and explore opportunities for multi-sector nutrition actions. A regional effort supports several innovations in community-based infant and young child feeding practices.

Analytic Work: Several reports and policy notes in past years have analyzed India’s progress towards the MDGs, the issues and challenges of India’s nutrition programs and their outcomes; and health services for the poor and marginalized. Non-lending technical assistance on repositioning nutrition has been completed, and analytical work on institutional arrangements for nutrition is planned.

Addressing undernutrition is cost effective: Costs of core micronutrient interventions are as low as US$0.05–3.60 per person annually. Returns on investment are as high as 8–30 times the costs.¹⁰