The Costs of Undernutrition
- Over one-third of child deaths are due to undernutrition, mostly from increased severity of disease.1
- 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 growth.
- 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.5

Where Does Ethiopia Stand?
- 51% of children under the age of five are stunted, 33% are underweight, and 12% are wasted.2
- About 1 in 5 infants are born with a low birth weight.2

Most of the irreversible damage due to malnutrition happens during gestation and in the first 24 months of life.6

As seen in Figure 1, although the overall prevalence of stunting and underweight has been decreasing over the past two decades, Ethiopia will not reach MDG 1c (halving 1990 rates of child underweight by 2015) with business as usual.6

The methodology for calculating nationwide costs of vitamin and mineral deficiencies, and interventions included in the cost of scaling up, can be found at: www.worldbank.org/nutrition/profiles

Vitamin and Mineral Deficiencies Cause Hidden Hunger
Although they may not be visible to the naked eye, vitamin and mineral deficiencies impact well-being and are pervasive in Ethiopia, as indicated in Figure 4.
Solutions to Primary Causes of Undernutrition

**Poor Infant Feeding Practices**
- About one-third of all newborns do not receive breast milk within one hour of birth.2
- Less than half of infants under six months are exclusively breastfed.2
- During the important transition period to a mix of breast milk and solid foods between six and nine months of age, over one-half of infants 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**
- 19% and 24% of deaths of children under five are due to diarrhea and pneumonia, respectively.5
- Undernutrition increases the likelihood of falling sick and 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**
- Over half of households are food insecure as defined per capita access to calories.7 Many more households likely lack access to diverse diets year round.
- 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. High levels of hidden hunger indicate that dietary diversity is likely to be low.

**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.

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**References**

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**FIGURE 3 Infant Feeding Practices and the Disease Burden Cross All Wealth Quintiles**

<table>
<thead>
<tr>
<th>Wealth Quintile</th>
<th>Prevalence of Stunting Among Children Under 5 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Richest</td>
<td>10</td>
</tr>
<tr>
<td>Fourth</td>
<td>12</td>
</tr>
<tr>
<td>Middle</td>
<td>16</td>
</tr>
<tr>
<td>Second</td>
<td>18</td>
</tr>
<tr>
<td>Poorest</td>
<td>22</td>
</tr>
</tbody>
</table>


**FIGURE 4 High Rates of Vitamin A and Iron Deficiency Contribute to Lost Lives and Diminished Productivity**

![Graph showing high rates of Vitamin A and Iron Deficiency Contribute to Lost Lives and Diminished Productivity]


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**World Bank Nutrition Related Activities in Ethiopia**

The World Bank is currently supporting a US$40 million Nutrition Project which focuses on improving child and maternal care behavior, and increasing the utilization of key micronutrients; and the US$110 million Food Security Project which is directed towards reducing the real cost of food, and improving nutrition for children under 5 and pregnant and lactating mothers.

**Addressing undernutrition is cost effective:** Costs of core nutrition 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