The Costs of Undernutrition

- Over one-third of child deaths are due to undernutrition, mostly from increased severity of disease.²
- 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.³

Where Does Timor-Leste Stand?

- Timor-Leste has the third-highest stunting rate in the world.²
- 54% of children under the age of five are stunted and 25% are wasted.²
- 12% of infants are born with a low birth weight.²
- Timor-Leste is not making progress on nutrition indicators and will not meet MDG 1 (eradicate extreme poverty by 2015).⁴

**Most of the irreversible damage due to malnutrition in Timor-Leste happens during gestation and in the first 24 months of life.⁴**

As seen in **Figure 1**, Timor-Leste has higher rates of stunting than other countries in the same region. Many countries with lower per capita incomes exhibit lower rates of child stunting, which demonstrates that it is possible to achieve better nutrition outcomes despite low income.

**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 highly prevalent in Timor-Leste particularly in young children, as indicated in **Figure 2**.

- **Vitamin A**: 46% of preschool aged children and 15% of pregnant women are deficient in vitamin A.⁶ Supplementation of young children and dietary diversification can eliminate this deficiency.
- **Iron**: Anemia is found in about 32% of preschool aged children and 23% of pregnant women, respectively.⁷ Approximately half of all anemia is due to dietary iron deficiency. Iron-folic acid supplementation of pregnant women, deworming, provision of multiple micronutrient supplements to infants and young children, and fortification of staple foods are effective strategies to improve the iron status of these vulnerable subgroups.
- **Iodine**: About 40% of households do not consume iodized salt,¹ leaving infants and children in those households unprotected from iodine deficiency disorders.
Solutions to Primary Causes of Undernutrition

### Poor Infant Feeding Practices
- 31% 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, 18% 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
- 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
- 23% of households are food insecure.\(^5\)

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

---

**References**

---

**World Bank Nutrition Related Activities in Timor-Leste**

The World Bank is supporting the US$20 million Health Sector Strategic Plan Support Project (HSSP-SP) which aims to improve the quality and coverage of preventive and curative health services, particularly for women and children, in order to accelerate progress toward the health Millennium Development Goals (MDGs).

---

**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.\(^5\)