



## Country Context

**HDI ranking:** 102nd out of 182 countries<sup>1</sup>

**Life expectancy:** 74 years<sup>2</sup>

**Lifetime risk of maternal death:** 1 in 850<sup>2</sup>

**Under-five mortality rate:** 15 per 1,000 live births<sup>2</sup>

**Global ranking of stunting prevalence:** 89th highest out of 136 countries<sup>2</sup>

## Technical Notes

**Stunting** is low height for age.

**Underweight** is low weight for age.

**Wasting** is low weight for height.

Current stunting, underweight, and wasting estimates are based on comparison of the most recent survey data with the WHO Child Growth Standards, released in 2006.

**Low birth weight** is a birth weight less than 2500g.

Maternal underweight is a pre-pregnancy BMI (body mass index) of <18.5 kg/m<sup>2</sup>.

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](http://www.worldbank.org/nutrition/profiles)

## The Costs of Undernutrition

- Over one-third of child deaths are due to undernutrition, mostly from increased severity of disease.<sup>2</sup>
- 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.<sup>3</sup>
- Maternal malnutrition, often arising from socio-cultural and behavioral factors, causes increased maternal morbidities and mortality, as well as low birthweight babies—which in turn predisposes children for undernutrition.

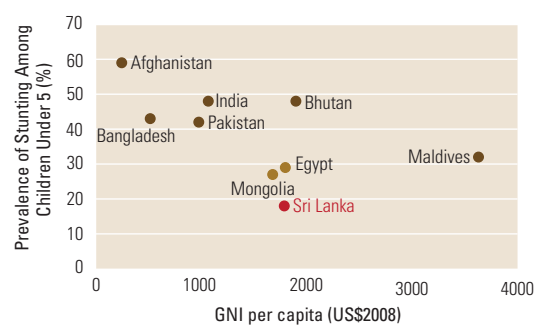
**Most of the irreversible damage due to malnutrition happens during gestation and in the first 24 months of life.<sup>6</sup>**

## Where Does Sri Lanka Stand?

- 18% of children under the age of five are stunted, 22% are underweight, and 15% are wasted.<sup>2</sup>
- Close to 1 in 5 infants (18%) are born with a low birth weight.<sup>2</sup>

As seen in **Figure 1**, when overall rates of child stunting are examined, Sri Lanka performs better than countries in its region and income group.

**FIGURE 1 Sri Lanka Has Relatively Lower Overall Stunting Rates than its Neighbors and Income Peers, but Large Inequities Exist**



Source: Stunting rates were obtained from WHO Global Database on Child Growth and Malnutrition. GNI data were obtained from the World Bank's World Development Indicators.

Scaling up core micronutrient interventions in Sri Lanka would cost less than US\$9 million per year.

(See *Technical Notes* for more information.)

## Key Actions to Address Undernutrition:

**Improve nutrition of adolescent girls and pregnant and lactating women.**

**Improve nutritional status of children in tea estates** through community-based nutrition programs targeted to those areas.

**Improve dietary diversity** through production of a diversity of foods and market and infrastructure development.

**Fortify staple foods with iron** (approximate Return on Investment: 800)<sup>4</sup>

**Continue to support vitamin A supplementation of young children.** (approximate Return on Investment: 1700)<sup>4</sup>

However, national aggregates mask widening inequalities between different population groups. For example, child undernutrition levels in tea estates are among the highest in the world, with rates of stunting as high as 42%.<sup>5</sup>

## 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 prevalent in Sri Lanka, as indicated in **Figure 2**.

- Adequate intake of micronutrients, particularly iron, vitamin A, iodine and zinc, from conception to age 24 months is critical for child growth and mental development.
- **Vitamin A:** 35% of preschool aged children, and 23% of pregnant women are deficient in vitamin A.<sup>8</sup> Supplementation of young children and dietary diversification can eliminate this deficiency.
- **Iron:** Current rates of anemia among preschool aged children and pregnant women are roughly

## Poor Infant Feeding Practices

- During the important transition period to a mix of breast milk and solid foods between six and nine months of age, 14% of infants are not fed appropriately with both breast milk and other foods.<sup>2</sup>
- Children below 2 years often do not receive sufficient quantity or quality of complementary foods. Dietary diversity and increased frequency of feeding are necessary for child nutrition.

**Solution:** Support women and their families to practice optimal breastfeeding and ensure timely and adequate complementary feeding. Exclusive breastfeeding rates are quite high (76%)<sup>2</sup> and should be maintained, while feeding of young children needs improvement.

## Maternal Undernutrition

- Almost 1 in 4 (22%) pregnant women are underweight when they register for pregnancy. This increases the risk for intrauterine growth retardation and low birthweight.
- Maternal undernutrition is particularly common in adolescent girls.
- Babies born to undernourished mothers start life at high risk for malnutrition and delayed development.

**Solution:** Encourage adequate intake of nutrient-dense food during pregnancy and lactation, monitor pregnancy weight gain, and counsel on reduced energy expenditure. Support adolescent girls and pregnant women to consume more diverse diets, as well as iron-folic acid tablets, to decrease micronutrient deficiencies.

## Limited Access to Nutritious Food

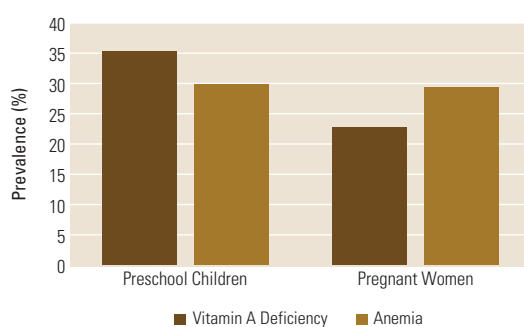
- More than 1 in 5 households are food insecure, as defined as per capita access to calories.<sup>7</sup> However, many more households likely lack access to diverse diets year round.
- Achieving food security means ensuring quality and continuity of food access, in addition to quantity, for all household members.
- Dietary diversity is essential for food security. High rates of hidden hunger indicate that dietary diversity may 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.

## References

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**FIGURE 2 High Rates of Vitamin A and Iron Deficiency Contribute to Lost Lives and Diminished Productivity**



Source: 1995–2005 data from the WHO Global Database on Child Growth and Malnutrition

30%.<sup>9</sup> Iron-folic acid supplementation of pregnant women, deworming, and the provision of multiple micronutrient supplements to infants and young children are effective strategies to improve the iron status of these vulnerable subgroups.

- **Zinc:** Zinc supplementation during diarrheal episodes can reduce morbidity by more than 40%.<sup>10</sup>
- **Iodine:** A success story is that Sri Lanka has achieved near universal salt iodization: an esti-

mated 94% of households consume iodized salt.<sup>2</sup> This is a major factor in preventing iodine deficiency, which can cause IQ loss in infants and young children.

## World Bank Nutrition-Related Activities in Sri Lanka

The World Bank recently approved US\$24 million additional financing for the Health Sector Development project to scale-up activities which include increasing access to maternal and child health care services. Emergency support has recently been approved from the Japan Social Development Fund to finance a project, “Local Level Nutrition Interventions for the Northern Province.”

**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.<sup>11</sup>**

