

NUTRITION at a GLANCE



LAO PDR

Public Disclosure Authorized



Country Context

HDI ranking: 138th out of 186 countries¹

Life expectancy: 67 years²

Lifetime risk of maternal death: 1 in 83⁵

Under-five mortality rate: 42 per 1,000 live births²

Global ranking of stunting prevalence: 7th highest out of 118 countries²

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 the most recent survey data from the Lao PDR Lao Social Indicator Survey (LSIS) 2011–2012.

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

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



THE WORLD BANK

Produced with support from the Japan Trust Fund for Scaling Up Nutrition

The Costs of Undernutrition

- Nearly half (45%) of all deaths in children under five are due to undernutrition.³
- 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.⁴

Where Does Lao PDR Stand?

- 44% of children under the age of five are stunted, 27% are underweight, and 6% are wasted.⁵
- 15% of infants are born with a low birth weight.⁵
- 59% of children 6–59 months of age received a vitamin A dose within the previous six months.⁵

As shown in **Figure 1**, Lao PDR performs worse than other countries in the same region and income group. Compared to African countries with less income, such as Uganda and Togo, stunting rates in Lao PDR are more severe.

Nutritional status also varies across income level. Children under five in the poorest income

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

FIGURE 1 Lao PDR has Higher Rates of Stunting than its Neighbors and Income Peers



Source: Stunting rates were obtained from UNICEF 2013 State of the World's Children. GNI data were obtained from the World Bank's World Development Indicators.

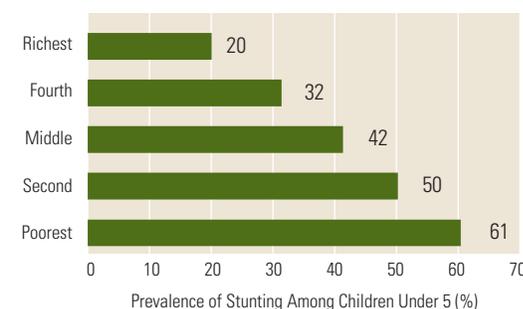
Annually, Lao PDR loses over US\$102 million in GDP to vitamin and mineral deficiencies.^{7B}

(See *Technical Notes* for more information)

Key Actions to Address Malnutrition:	Approximate Return on Investment (%): ¹¹
Improve infant and young child feeding through effective education and counseling services.	1400
Invest in Vitamin A Supplementation.	1700
Achieve universal salt iodization.	3000
Fortify commonly consumed foods with iron.	800
Ensure an adequate supply of zinc supplements for the treatment of diarrhea.	1370

level are more than 3 times as likely to be stunted as those in the richest income level. However, undernutrition is not just a problem of poverty. As **Figure 2** shows, children are undernourished in one-fifth of even the richest households. This is not an issue of food access, but of caring practices and high disease burden.

FIGURE 2 Undernutrition Affects All Wealth Quintiles



Source: Lao Social Indicator Survey (LSIS) 2011–2012.

Vitamin and Mineral Deficiencies Cause Hidden Hunger

Although they may not be visible to the naked eye, vitamin and mineral deficiencies impact well-being in Lao PDR, as indicated in **Figure 3**.

Poor Infant Feeding Practices

- 39% of all newborns receive breast milk within one hour of birth.⁵
- Less than half (40%) of infants under six months are exclusively breastfed.⁵
- During the important transition period to a mix of breast milk and solid food between six and nine months of age, nearly half (48%) of infants are not fed appropriately with both breast milk and other foods.⁵

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 exposures to infections.

High Disease Burden

- In Lao PDR, 11% of deaths of children under 5 are due to diarrhea.¹³
- 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

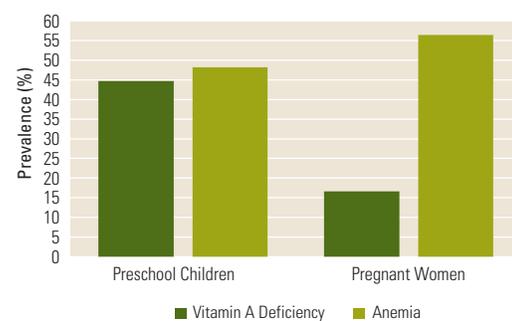
- 27% of households were food insecure in 2013.¹⁴
- Achieving food security means ensuring quality and continuity of food access, in addition to quantity, for all household members.
- Dietary diversity is essential for food security.

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

References

1. UNDP. 2013. Human Development Report.
2. UNICEF. 2013. State of the World's Children.
3. Black R et al. 2013. *Maternal and Child Undernutrition and Overweight in Low-income and Middle-income Countries*. Lancet.382: 427–451.
4. Horton S. and Ross J. 2003. *The Economics of Iron Deficiency*. Food Policy. 28:517–5.
5. Lao PDR Lao Social Indicator Survey (LSIS) 2011–2012.
6. UNICEF. 2009. *Tracking Progress on Child and Maternal Nutrition*.
7. Micronutrient Initiative and UNICEF. 2004. *Vitamin and Mineral Deficiency: A Global Progress Report*.
8. World Bank. 2013. *World Development Indicators*.
9. WHO. 2009. Global Prevalence of Vitamin A Deficiency in Populations at Risk 1995–2005: WHO Global Database on Vitamin A Deficiency.
10. WHO. 2008. Worldwide Prevalence of Anemia 1993–2005: WHO Global Database on Anemia.
11. Micronutrient Initiative. 2009. Investing in the Future: A united call to action on vitamin and mineral deficiencies.
12. Bhandari N., et al. 2008. *Effectiveness of Zinc Supplementation Plus Oral Rehydration Salts Compared With Oral Rehydration Salts Alone as a Treatment for Acute Diarrhea in a Primary Care Setting: A Cluster Randomized Trial*. Pediatrics. Vol. 121 No. 5.
13. Institute for Health Metrics and Evaluation (IHME). 2013. Global Burden of Disease Data.
14. FAO. 2013. *The State of Food Insecurity in the World: The multiple dimensions of food security*.
15. Horton S. et al. 2009. *Scaling Up Nutrition: What will it cost?*

FIGURE 3 High Rates of Vitamin A and Iron Deficiency Contribute to Lost Lives and Diminished Productivity



Source: Data from the WHO Global Database on Child Growth and Malnutrition

- **Vitamin A:** About 45% of preschool aged children and 12% of pregnant women are deficient in vitamin A.⁹
- **Iron:** About half of preschool aged children (48%) and pregnant women (56%) have anemia.¹⁰ 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:** 80% of households consume iodized salt.⁵
- **Zinc:** Nearly 36% of the population is at risk of insufficient zinc intake.¹¹ Zinc supplementation during diarrheal episodes can reduce morbidity by more than 40%.¹²

World Bank Nutrition-related Engagements in Lao PDR

The World Bank is supporting both nutrition-sensitive and nutrition-specific interventions involving multiple sectors. For example, in the health sector, the Community Nutrition Project includes sharing of key messages on infant and young child feeding practices at the community-level, distribution of micronutrients, and encouraging the use of preventative maternal and child health services at health facilities. The Health Services Improvement Project is similarly focused on reducing the burden of disease among children and improving the health of pregnant women. In the water and sanitation sector, Community-led Total Sanitation is being piloted to create demand for sanitation facilities and reduce environmental enteropathy and diarrheal diseases. In the agriculture sector, various projects are involved in interventions to improve rice productivity and to improve food security in the upland areas.

At the policy-level, the World Bank recently collaborated with FAO on the Rice Policy Study (2012) and is financing a knowledge exchange activity between Lao PDR and Indonesia to facilitate high-level interactions among policy-makers to improve the effectiveness of and to scale-up nutrition interventions.

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.¹⁵