

Why Invest in Nutrition?

- Of the 900,000 children under 5 years of age in Laos, approximately 400,000 (44%) are stunted. These undernourished children have an increased risk of mortality, illness and infections, delayed development, cognitive deficits, poorer school performance, and fewer years in school.
- The mortality rate for children under 5 is 79 per 1,000 live births—nearly 45% of these child deaths are attributable to various forms of undernutrition.
- Malnutrition undermines human capital and economic productivity and can limit progress in achieving at least 6 of the 8 Millennium Development Goals and targets set by the World Health Assembly.
- Investing in nutrition in Laos is necessary to significantly reduce child mortality, improve children's school performance, and will result in greater economic productivity for the nation.

Summary of Nutritional Status and Priorities

Stunting affects 44% of children under 5 years of age in Laos and 20% are already stunted by 6 months of age. The poor, ethnic minority groups, and upland areas of the country are disproportionately affected, with levels reaching 61%. Ethnic minority groups also have higher wasting rates—13% compared to 6% of children under 5 nationally. Nationally, anemia affects 41% of children under 5 years of age, two-thirds of children under 2 years, and roughly a third of women of reproductive age. Approaches to improve nutrition need to address underlying and basic nutrition-sensitive causes, such as poverty (national poverty prevalence was 28% in 2008 [United Nations]), low vaccination coverage; water, sanitation, and hygiene; health care access; and maternal education levels. Nutrition-specific interventions also need to be provided, especially to improve infant and young child feeding (IYCF) practices, micronutrient supplementation coverage, and child illness prevention and treatment through strengthened nutrition and health service delivery.

Stunting. Stunting is a severe public health problem in Laos that has only decreased slightly since 2000 and affects 44% of children under 5. Mountainous “upland” areas have even higher stunting rates (approximately 50%), as do minority ethnic groups which primarily reside in upland areas (reaching 61% of Hmong-Mien and Chinese-Tibetan children under 5) and children of mothers with less education and from lower wealth groups (61% of children from the lowest wealth quintile are stunted compared to 20% in the highest). Prenatal factors such as maternal nutrition and low birth weight, which affects 15% of births nationally, play an important role as 20%

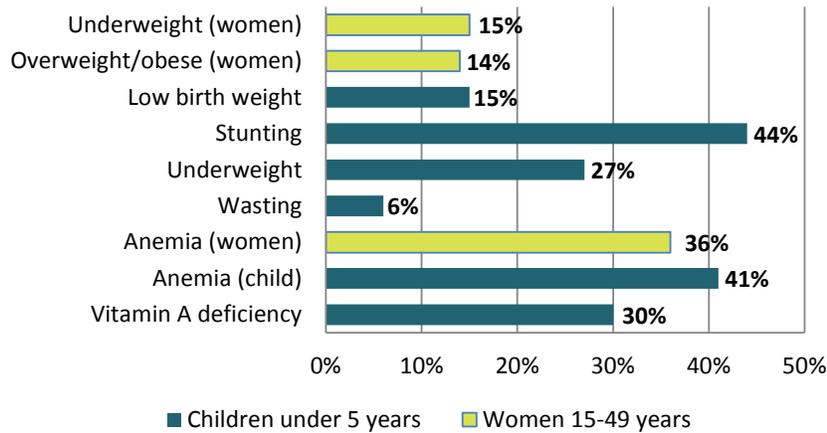
of children 0–6 months of age are already stunted. Suboptimal IYCF practices—particularly delayed initiation of breastfeeding, low rates of exclusive breastfeeding, delayed initiation of complementary feeding, and low feeding frequency—and infectious disease—particularly diarrhea caused by inadequate water, sanitation, and hygiene practices—are other prime determinants.

Wasting. Wasting affects on average 6% of children under 5 in Laos, which hides variations by age (13% of children 6–11 months of age are wasted), province (21% of children under 5 are wasted in Luangnamtha province), and ethnic group (13% of Hmong-Mien children are wasted). Natural disasters common in Laos can be triggers for spikes in wasting prevalence, particularly in already underprivileged groups (WFP).

Anemia and micronutrient deficiencies. Nearly two-thirds of children under 2 years of age are anemic (Ministry of Health and UNICEF 2006) and about a third of children under 5 are estimated to be vitamin A deficient (as of 2007) (UNSCN 2010). Slightly over a third of women of reproductive age are also anemic (Ministry of Health and UNICEF 2006). Eighty percent of households consume salt with iodine (although not necessarily at adequate levels) (LSIS 2011–2012) and 27% of school-age children had low urinary iodine concentrations (< 100 ug/L) in 2001 (WHO 2007).

Maternal nutrition and low birth weight. In 2006, 15% of women were underweight in Laos, which is about equal to the percentage of women who were overweight (14%) (WHO). A similar percentage of births are low birth weight.

Maternal and Child Malnutrition Indicators in Laos



Sources: LSIS 2011–2012; vitamin A deficiency: UNSCN 2010; women under-weight and overweight: WHO; anemia: Ministry of Health and UNICEF 2006
 Notes: Data for anemia is among children under 6 years of age.
 The median urinary iodine concentration (UIC) for school-age children is 162 ug/L; the proportion of school-age children with low UIC (< 100 ug/L) is 27% (WHO 2007).

Key Drivers of Maternal and Child Malnutrition in Laos

Immediate and Underlying

- Suboptimal IYCF practices, particularly significantly delayed initiation of breastfeeding, low rates of exclusive breastfeeding, delayed initiation of complementary feeding, and low feeding frequency.
- Inadequate water, sanitation, and hygiene practices, particularly use of appropriate treatment methods for unimproved water sources, access to hygienic sanitation facilities for removal of waste, and handwashing practices.
- High burden of infectious disease, particularly diarrhea, intestinal parasites, malaria, and pneumonia.
- Food insecurity, particularly in northern upland regions due to small land holdings, dependence on rainfall, natural disasters, unexploded bombs limiting land availability, and poor roads/infrastructure.
- Low dietary diversity with heavy reliance on staples (rice) and low intake of meat, fats, and fruit.
- Low access/utilization of prenatal care.
- Maternal malnutrition and low birth weight.

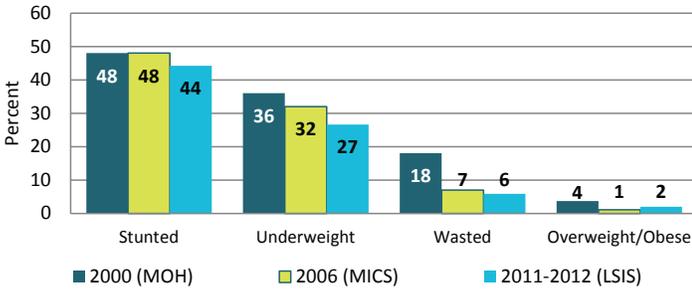
- Extremely low vaccination coverage.
- Food restrictions and taboos of pregnant and lactating mothers that restrict intake of protein-rich foods such as meat, fish, and eggs.
- Childbearing in adolescence, particularly in rural areas.

Basic

- Majority of the population lives in mountainous areas that are less integrated into the national infrastructure for health and other essential services.
- Low education levels (particularly among women) and poverty (particularly among ethnic minorities residing in mountainous areas).
- Disaster-prone and climate-change sensitive environment (flooding, storms, drought), which can lead to severe reductions in food intake due to harvest losses and inability to purchase food.
- Ethnic and linguistic diversity (200+ languages) which can create challenges in communication as well as multiple views on “appropriate” dietary practices.

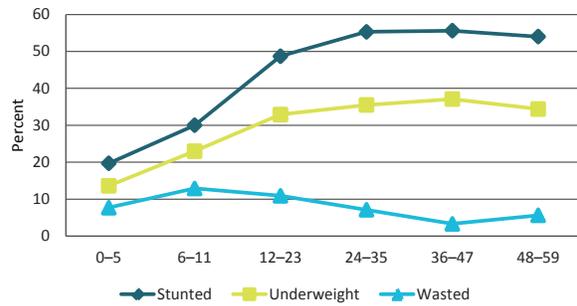
Child Nutrition

Trends in Nutritional Status of Children Under 5, 2000–2012



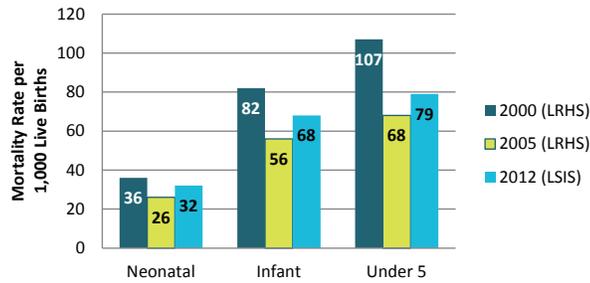
Sources: LSIS 2011–12; 2000 and 2006 data: WHO Global Database on Child Growth and Malnutrition (reanalyzed to account for the change in 2006 to the WHO Child Growth Standard so they would be comparable to the 2011 data)

Nutritional Status of Children by Age (in Months)



Source: WHO Global Database on Child Growth and Malnutrition

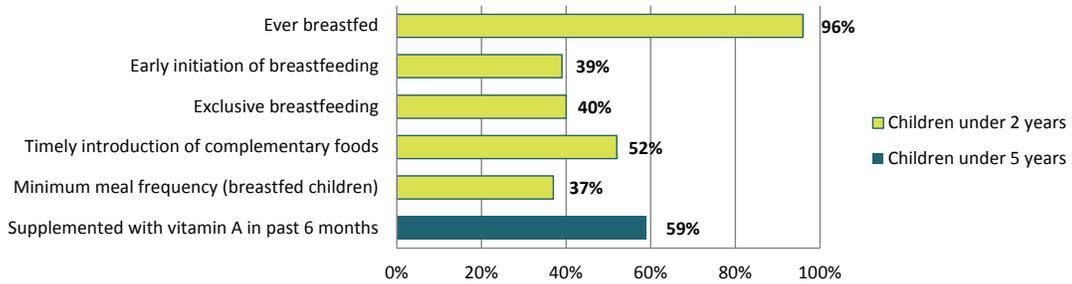
Child Mortality, 2000–2012



Sources: LSIS 2011–2012; Laos Reproductive Health Survey 2000 and 2005

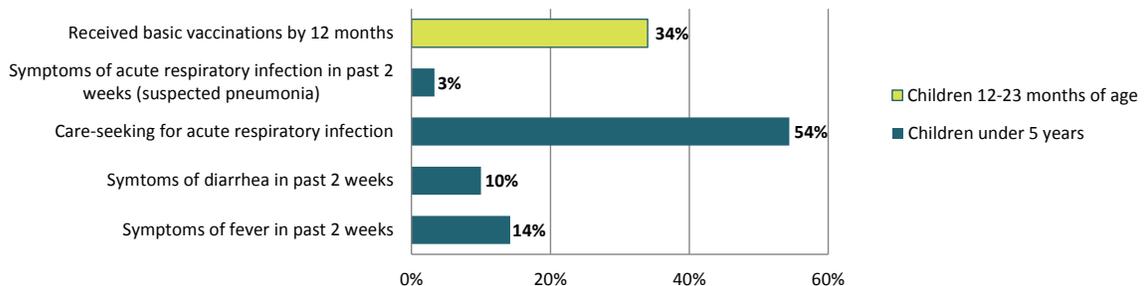
Note: Data are for the time period within the previous 5 years of the survey, except for the 2012 data, which are for 1 year preceding the survey.

Dietary Practices of Children



Source: LSIS 2011–2012

Child Health Indicators



Source: LSIS 2011–2012

Note: Basic vaccinations include BCG, measles, and three doses each of DPT and polio vaccine.

Maternal Nutrition

Maternal Health Indicators	
Maternal mortality ratio (per 100,000 live births)	470
Total fertility rate (children per women)	3.2
Median age at first marriage (of women 25–49 years)	19.2
Median age at first birth (of women 25–49 years)	21.1
% of women (25–49 years) who gave birth by 18 years of age	19.4
% of women 15–19 years who have begun childbearing by 19	No data
Median number of months since preceding birth (of women 15–49 years)	No data
% of married women currently using any method of family planning	49.8
% of married women with an unmet need for family planning	19.9
% of women 15–49 years with a live birth in the past 2 years receiving antenatal care from a “medically-trained” or “skilled” provider (doctor, nurse/midwife, and auxiliary midwife)	54.2
% of women 15–49 years with birth in the past 2 years who delivered in a health facility	37.5
% of women 15–49 years with birth in the past 2 years who delivered with a “medically-trained” or “skilled” provider (doctor, nurse/midwife, and auxiliary midwife)	41.5
Maternal Nutrition Indicators	
% of women 15–49 years anemic (Hb < 11 g/dL pregnant; Hb < 12 g/dL non-pregnant)	36.2
% of women with birth in the last 2 years given vitamin A supplementation after birth of last child	17.9
% of women with birth in the last 2 years given any iron supplementation during last pregnancy	No data
% of women with birth in the last 2 years who took at least 90 days of iron supplementation during pregnancy of last child	25.4
% of women with birth in the last 2 years who took deworming medication in last pregnancy	No data
% of households tested with iodized salt	79.5

Sources: LSIS 2011–2012; maternal mortality: UNICEF 2012; anemia: Ministry of Health and UNICEF 2006; vitamin A supplementation: Department of Statistics and UNICEF 2008

Food Security; Diet Diversity; and Water, Sanitation, and Hygiene

Food Security Indicators	
Global Hunger Index (2013)	18.7 (serious level of hunger)
% of households with poor or limited food consumption (food insecure) (2013)	11.0
% of undernourished in total population (2013)	26.7
Food supply (kcal/capita/day) (2009)	2,377
Depth of food deficit (kcal/capita/day) (2011–2013)	195
Diet Diversity Indicators	
% of dietary energy supply from cereals, roots, and tubers (2008–2010)	73
Average supply of protein from an animal source (grams/capita/day) (2008–2010)	14
Water, Sanitation, and Hygiene Indicators	
% of population with access to improved drinking water sources (2011–2012)	70
% of population with access to sanitation facilities (2011–2012)	59
% of population using appropriate treatment method for drinking water (2011–2012)	53

Sources: FAO 2013; Global Hunger Index: von Grebmer et al. 2013; food insecure: WFP and Federal Ministry for Economic Cooperation and Development 2013; food supply: FAOSTAT (<http://faostat3.fao.org/faostat-gateway/go/to/browse/FB/FB/E>); water, sanitation, and hygiene indicators: LSIS 2011–2012

Gender

Gender inequality remains a problem in Laos, although there is limited data. Both the LSIS 2011–2012 and a gender assessment by the World Bank and the Asian Development Bank indicate that adolescent marriage and childbearing is widespread, particularly in rural areas of Laos. When coupled with a maternal mortality rate of 470 per 100,000 and inadequate health services, this contributes significantly to poor birth outcomes and low birth weight. While school enrollment has improved, there are still disparities between girls' and boys' access to education, with fewer girls enrolling or being able to continue their education. Nearly equal numbers of men and women participate in the workforce (nearly 80% of women), however, women earn less than men. Overall, the majority of work is in the informal sector, which for women means employment in the agriculture sector and increasingly in the garment sector. In the informal

sector women lack rights with regard to leave and this likely adversely affects their ability to provide optimum child care.

Domestic violence is thought to affect one in five women, and the LSIS 2011–2012 found that more women (58%) than men (49%) felt that domestic violence was acceptable for reasons such as going out without telling her spouse, neglecting her children, arguing with her spouse, refusing sex, and burning food. The high social acceptance among women of domestic violence indicates that gender inequality remains deeply entrenched. There is no data on women's decision-making capabilities or rights in the home, so it is difficult to be sure of the degree to which women have access to or control over resources, particularly as they affect food security and nutrition.

Government Policies and Program Environment: Needs and Challenges

Policies. The Government of Laos has two key documents that provide a framework for multisectoral action on nutrition: the National Nutrition Policy (issued in 2008) and the National Nutrition Strategy and National Plan of Action for Nutrition 2010–2015, which provides responsibilities and timelines for interventions based on the overall scope and objectives of the National Nutrition Policy. The national nutrition strategy and plan of action aims to improve IYCF practices, improve availability and access to food, improve access to health services, improve environmental health (water, sanitation, and hygiene) and reduce infectious diseases, increase cross-sector coordination, increase investment in nutrition, improve human capacity, and implement an improved nutrition information and surveillance system. As part of its commitment to the Scaling Up Nutrition (SUN) Movement, which Laos joined in 2011, the government is currently determining their systematic approach to scaling up nutrition for the period of 2013–2015, as well as how to strengthen the implementation of the International Code of Marketing for Breast Milk Substitutes and universal salt iodization efforts (SUN 2011). The government is also planning to review the national nutrition strategy and plan of action to determine immediate actions for 2015 to increase attainment of the Millennium Development Goals (ibid).

collaboration with several development partners (WHO 2012). Health care at the village level is provided by health volunteers and managed by a village health committee, and most of the services at this level are dependent on mobile services (WHO).

Needs and challenges. Although the government is the main provider of health services, the public health system is underfunded and out of pocket spending for health care constitutes 75% of total health expenditures (United Nations Lao PDR). Coverage of rural areas with health services is very low—only 8% of villages have their own health center (ibid)—and the health system suffers from limited qualified staff, particularly in remote rural areas. Access to health services is hampered by distance, poor infrastructure (roads), financial barriers due to user fees, and limited staff (WHO 2011). Community involvement and mobilization to increase health education and awareness of health and nutrition issues has been judged to be inadequate (ibid). Implementation of the Integrated Maternal, Neonatal, and Child Health Services Package has been seen as an opportunity to increase community involvement and awareness of health and nutrition issues of women and children (ibid).

Development Partner Support

- In Laos, the EU funds food security projects with nongovernmental organizations supporting the Linking Agriculture, Nutrition and Natural Resources Program and advocates for nutrition and food security issues to be addressed in a cross-sectoral manner.
- The World Bank supports the Community Nutrition Program with the Ministry of Health and implements programs focused on mother and child nutrition, safety nets, and support for a national school meals initiative.
- AusAID provides bilateral assistance through an integrated livelihoods approach to improve food security and nutrition outcomes within Laos.
- UNICEF and the EU, through the MYCSNIA Program, provide communication and counseling for IYCF, promote consumption of locally-produced micronutrient-rich foods, distribute and promote the use of micronutrient powders, and help local and national institutions with data analysis and interpretation to better inform national policies and programs. In addition, UNICEF supports the integrated management of acute malnutrition in EU-supported health centers, advocates for and supports vitamin A and iron supplementation and school deworming, supports Lao salt producers, and

Nutrition-Specific Policies

National Breastfeeding Policy

National Food Security Strategy, 2000–2010

Law on Hygiene, Disease Prevention, and Health Promotion, 2001

National Code of Marketing of Breast Milk Substitutes, 1995

Regulations on Infant and Child Food Product Control, 2007

Agriculture Development Strategy (strong nutrition component)

Law on Food, 2004

Programs. Nutrition interventions at the community level (including micronutrient supplementation) are provided through the Integrated Maternal, Neonatal, and Child Health Services Package (2009–2014) implemented by the Ministry of Health in close

assists the government to control salt production quality and monitor consumers' salt consumption.

- As a pilot country for Renewed Efforts Against Child Hunger (REACH), Laos receives support from WFP to reduce malnutrition through supplementary feeding and therapeutic feeding programs, to build the government's capacity in

emergency preparedness (with UNDP, UNICEF, and WHO), and to address high rates of stunting through a school feeding and nutrition education package and fortification of food.

- FAO, also under REACH, is working to improve food security through improvement in local dietary diversity and proper food storage.

Recommended Nutrition Priorities

Key nutrition priorities for Laos include focusing on stunting, wasting, anemia, micronutrient deficiencies, maternal nutrition, and low birth weight. Programs and activities should be focused on women and children in the lowest wealth quintile, who are disproportionately affected. USAID has invested in health programs and activities, but none of these funds were allocated to nutrition specifically. However, given the high prevalence of stunting and that Laos is a SUN Movement country, increasing the allocation for nutrition could help bolster efforts to reduce malnutrition. Among existing USAID-funded activities and programs this includes integrating evidence-based nutrition-specific interventions and actions. Additional opportunities for investment include:

- Supporting and undertaking nutrition advocacy to augment accountability and governance for nutrition and strengthen multisectoral coordination
- Investing in nutrition interventions focused on the first 1,000 days (from pregnancy through the first two years of life), with a particular focus on improving early initiation of breastfeeding, exclusive breastfeeding, and IYCF practices
- Investing to expand the health service delivery system and improve quality of service delivery, while also integrating nutrition services within this system
- Strengthening the capacity of health service providers in nutrition
- Providing direct technical assistance on nutrition

In terms of opportunities to support the Government of Laos, opportunities include:

- Engaging with the government to strengthen the community-level implementation and quality of nutrition service delivery within the Integrated Maternal, Neonatal and Child Health Services Package
- Building capacity in nutrition (e.g., in evidence-based nutrition interventions) among health professionals and health volunteers, particularly on IYCF practices

USAID can also work in close coordination with other donors to:

- Support the SUN Movement and other government initiatives to promote nutrition service delivery
- Align resource allocation to limit duplication of activities and leverage donor investments to strategically invest in nutrition, focusing on areas that need added resources such as IYCF and quality nutrition service delivery

Recommended Indicators to Monitor Nutritional Impact

It is recommended that USAID incorporate the following key nutrition indicators into new and existing implementation plans in order to specifically monitor the impact of USAID programs on maternal and child nutrition status.

1. Prevalence of underweight children under 5 years of age (< -2 SD)
2. Prevalence of stunted children under 5 years of age (< -2 SD)
3. Prevalence of stunted children under 2 years of age (< -2 SD)
4. Prevalence of wasted children under 5 years of age (< -2 SD)
5. Prevalence of underweight women (BMI < 18.5)
6. Women's dietary diversity: mean number of food groups consumed by women of reproductive age
7. Prevalence of exclusive breastfeeding of children under 6 months of age
8. Prevalence of children 6–23 months receiving a minimum acceptable diet

While nutrition-sensitive interventions can have an impact on the indicators listed, it is critical to implement nutrition-specific activities that address the direct causes of malnutrition in order to see reductions in these key indicators.

References

Asian Development Bank and the World Bank. 2012. *Country Gender Assessment for Lao PDR-Reducing Vulnerability and Increasing Opportunity*. Mandaluyong City, Philippines and Washington, DC, USA: Asian Development Bank and The International Bank for Reconstruction and Development/The World Bank.

Committee for Planning and Investment et al. 2007. *Lao Reproductive Health Survey 2005*. Vientiane, Lao PDR: Committee for Planning and Investment and National Statistics Center.

Department of Statistics and UNICEF. 2008. *Lao PDR Multiple Indicator Cluster Survey 2006, Final Report*. Vientiane: Department of Statistics and UNICEF.

FAO. 2013. "Statistics: Food Security Indicators." Available at <http://www.fao.org/economic/ess/ess-fs/fs-data/en/#.UwY1EvdXT0>.

Ministry of Health and Lao Statistics Bureau. 2012. *Lao PDR Lao Social Indicator Survey (LSIS) 2011-12 (Multiple Indicator Cluster Survey/Demographic and Health Survey)*. Vientiane, Lao PDR: Ministry of Health and Lao Statistics Bureau.

Ministry of Health and UNICEF. 2006. *Multiple Indicator Cluster Survey (MICS) 3*. Cited by WFP, 2014, "Children and Women Nutritional Status," available at <http://www.foodsecurityatlas.org/lao/country/utilization/childrens-women-nutritional-status>.

SUN. 2011. "Lao PDR." Available at <http://scalingupnutrition.org/sun-countries/lao-pdr>.

UNICEF. 2012. "Information by Country and Program." Available at <http://www.unicef.org/infobycountry/>.

United Nations. "Millennium Development Goals Indicators." Available at <http://mdgs.un.org/unsd/mdg/data.aspx>.

United Nations Lao PDR. *Country Analysis Report: Lao People's Democratic Republic; Analysis to inform the selection of priorities for the next UN Development Assistance Framework (UNDAF) 2012-2015*. Vientiane: The United Nations in the Lao PDR.

UNSCN. 2010. *Sixth Report on the World Nutrition Situation: Progress in Nutrition*. Geneva: UNSCN Secretariat c/o World Health Organization.

von Grebmer, K., et al. 2013. *2013 Global Hunger Index: The Challenge of Hunger: Building Resilience to Achieve Food and Nutrition Security*. Bonn, Washington, DC, and Dublin: Welthungerhilfe, International Food Policy Research Institute, and Concern Worldwide.

WFP. *WFP Lao PDR Country Strategy 2011-2015*. Vientiane, Lao PDR: World Food Programme, Lao PDR.

WFP and Federal Ministry of Economic Cooperation and Development. 2013. *Food and Nutrition Security Atlas for Lao PDR*. Lao PDR: WFP Country Office.

WHO. "Global Database on Child Growth and Malnutrition." Available at <http://www.who.int/nutgrowthdb/database/countries/lao/en/>.

WHO. "Nutrition Landscape Information System Country Profile." Available at <http://apps.who.int/nutrition/landscape/report.aspx?iso=LAO&rid=161&template=nutrition&goButton=Go>.

WHO. 2011. *WHO Country Cooperation Strategy for the Lao People's Democratic Republic 2012-2015*. Geneva: WHO.

WHO. 2012. *Health Service Delivery Profile: Lao PDR*. Available at http://www.wpro.who.int/health_services/service_delivery_profile_laopdr.pdf.



Contact Information:

Food and Nutrition Technical Assistance III Project (FANTA)
FHI 360
1825 Connecticut Avenue, NW
Washington, DC 20009-5721
Tel: 202-884-8000
Fax: 202-884-8432
Email: fantamail@fhi360.org
Website: www.fantaproject.org

Recommended Citation:

Chaparro, C.; Oot, L.; and Sethuraman, K. 2014. *Laos Nutrition Profile*. Washington, DC: FHI 360/FANTA.

This nutrition profile is made possible by the generous support of the American people through the support of the Office of Health, Infectious Diseases, and Nutrition, Bureau for Global Health, U.S. Agency for International Development (USAID) and USAID Bureau for Asia under terms of Cooperative Agreement No. AID-OAA-A-12-00005, through the Food and Nutrition Technical Assistance III Project (FANTA), managed by FHI 360.

The contents are the responsibility of FHI 360 and do not necessarily reflect the views of USAID or the United States Government.

The intended purpose of this profile is to provide a broad overview of the status of nutrition in Laos in order to inform potential US-supported efforts. For more information on USAID health programming in Laos, please visit: www.usaid.gov/laos. To view USAID's Global Health nutrition portfolio and its extensive contributions, please visit: www.usaid.gov/what-we-do/global-health/nutrition.