



Zambia: Nutrition Profile

Malnutrition in childhood and pregnancy has many adverse consequences for child survival and long-term well-being. It also has far-reaching consequences for human capital, economic productivity, and national development overall. The consequences of malnutrition should be a significant concern for policy makers in Zambia, where 1.12 million children (40 percent) under 5 years suffer from chronic malnutrition (stunting or low height-for-age) and 420,000 children (15 percent) under 5 years suffer from acute malnutrition (wasting or low weight-for-height), according to the most recent Demographic and Health Survey (DHS) (Central Statistical Office [CSO] [Zambia], Ministry of Health [MOH][Zambia], and ICF International 2014).

Background

Zambia experienced rapid economic growth during the past decade and graduated from a low-income to a lower-middle-income country in 2011. However, hard hit by lower copper prices and domestic pressures, including a poor harvest after an El-Niño-induced drought in 2015, a power crisis, and political uncertainty in the lead-up to 2016 elections, in 2015 the economy had tumbled to its lowest since 1998, with growth registering just 2.9 percent. The economy is slowly recovering and growth is forecast to strengthen to 4.5 percent in 2018 and 4.7 percent in 2019 (World Bank 2017).

Poverty remains high in rural areas, where nearly 60 percent of the population lives. Fifty-four percent of Zambians continue to live on less than US\$1.90 a day (Sachs et al. 2017). Zambia ranks among the top 20 countries in the world for relative income inequality (USAID 2017). Relative to other countries in the region, however, Zambia has an abundance of water and fertile land, as well as a generally favorable climate for agricultural production (USAID 2017). Agriculture employs 70 percent of the labor force (Zambia Ministry of Agriculture, Livestock and Fisheries 2011).

Though stable for most of its post-colonial history, the country entered a new phase when President Edgar Lungu and his Zambia's Patriotic Front government were re-elected in a closely contested presidential race in August 2016. He has called for an end to moral decay and national transformation to address high levels of poverty, and has initiated a reform to the Lands Act to avoid the indiscriminate and illegal sale of land in the country (World Bank 2017).

Currently, Zambia ranks 134th out of 157 countries in progress toward meeting the Sustainable Development Goals (SDGs) (Sachs et al. 2017). Infant and under-5 mortality rates are 45 and 75 deaths per 1,000 live births, respectively. At these mortality levels, 1 in every 22 Zambian children will die before reaching his or her first birthday, and one in every 13 will not survive to his or her fifth birthday (CSO, MOH, and ICF International 2014).

Nutrition and Food Security Situation

Malnutrition is a major burden on the Zambian health care system and contributes to low human capital. Nationally, 40 percent of children under 5 years are stunted. Analysis by age groups shows that stunting is highest (54 percent) in children 18–23 months and lowest (14 percent) in children under 6 months. Children in rural areas (42 percent) are more likely to be stunted than those in urban areas (36 percent). At the provincial level, Northern has the highest proportion of stunted children (49 percent), while Copperbelt, Lusaka, and Western have the lowest proportions (36 percent each). A mother's level of education generally has an inverse relationship with stunting levels; stunting ranges from a low of 18 percent among children whose mothers have more than a secondary education to a high of 45 percent among those whose mothers have no education. A similar inverse relationship is observed between stunting and

wealth. Children in the poorest households are much more likely to be stunted (47 percent) than children in the wealthiest households (28 percent) (CSO, MOH, and ICF International 2014).

Overall, 6 percent of children are wasted. Analysis by age group shows that wasting ranges from 5 percent among children 24–59 months to 10 percent among those 9–11 months. Wasting does not vary extensively by gender, by length of preceding birth interval, or by residence. Wasting is most likely to occur among babies who were very small or small at birth (9 percent) and least likely among those whose birth size was average or larger (6 percent). Wasting is slightly higher among children whose mothers are thin than among those whose mothers are normal, overweight, or obese (8 percent versus 6 percent). By province, wasting is highest among children in Luapula (13 percent) and lowest among children in Muchinga, Northern, and Southern (4 percent each). There is no major variation in wasting by a mother’s education or household wealth (CSO, MOH, and ICF International 2014).

Childbearing begins early in Zambia. By age 19, 59 percent of adolescent girls had begun childbearing in 2013–2014, which is an increase from 55 percent in 2007 (CSO, MOH, and ICF International 2014). This has serious consequences because, relative to older mothers, adolescent girls are more likely to be malnourished and have a low birth weight baby who is more likely to become malnourished, and be at increased risk of illness and death than those born to older mothers. The risk of stunting is 33 percent higher among first-born children of girls under 18 years in Sub-Saharan Africa, and as such, early motherhood is a key driver of malnutrition (Fink et al. 2014).

High morbidity, limited access to health services, poverty, and food insecurity are the major determinants of undernutrition in children. Although exclusive breastfeeding from 0–5 months increased to 73 percent, it drops to 45 percent among children 4–5 months, and only 12 percent of children 6–23 months receive a minimum acceptable diet, which has a major impact on their growth and development (CSO, MOH, and ICF International 2014).

Zambia also has a high HIV prevalence of 13 percent among adults 15–49 (15 percent of women and 11 percent of men). A comparison of the HIV prevalence estimates indicates that HIV prevalence among adults in Zambia has decreased over time (from 16 percent in 2001–02 to 13 percent in 2013–14) (CSO, MOH, and ICF International 2014). HIV can cause or aggravate malnutrition through reduced food intake, increased energy needs, and poor nutrient absorption. In turn, malnutrition can hasten the progression of HIV and worsen its impact by weakening the immune system and impairing an individual’s ability to fight and recover from illness. HIV affects nutritional status early in the infection, even before other symptoms appear.

Zambia is also experiencing the double burden of malnutrition with 23 percent of women and 6 percent of children under 5 years suffering from overweight and obesity (CSO, MOH and ICF International 2014).

Zambia Nutrition Data (DHS 2007 and 2013–2014)		
Population 2016 (UNICEF 2017)	16.6 million	
Population under 5 years (0–59 months) 2016 (UNICEF 2017)	2.8 million	
	DHS 2007	DHS 2013-2014
Prevalence of stunting among children under 5 years (0–59 months)	45%	40%
Prevalence of underweight among children under 5 years (0–59 months)	15%	15%
Prevalence of wasting among children under 5 years (0–59 months)	5%	6%
Prevalence of low birth weight (less than 2.5 kg) (of children whose birth weights are known)	9%	9%

Prevalence of anemia among children 6–59 months	55% (MIS 2012)	60% (MIS 2015)
Prevalence of anemia among women of reproductive age (15–49 years)	NA	47% (MIS 2015)
Prevalence of thinness among women of reproductive age (15–49 years)	10%	10%
Prevalence of thinness among adolescent girls (15–19 years) (BMI less than 18.5 kg/m ²)	15%	16%
Prevalence of children 0–5 months exclusively breastfed	61%	73%
Prevalence of children 4–5 months exclusively breastfed	35%	45%
Prevalence of early initiation of breastfeeding (i.e., put to the breast within one hour of birth)	57%	66%
Prevalence of children who receive a pre-lacteal feed	9%	4%
Prevalence of breastfed children 6–23 months receiving minimum acceptable diet	NA	12%
Prevalence of overweight/obesity among children under 5 years (0–59 months)	8%	6%
Prevalence of overweight/obesity among women of reproductive age (15–49 years)	19%	23%
Coverage of iron for pregnant women (for at least 90 days)	44%	59%
Coverage of vitamin A supplements for children (6–59 months, in the last 6 months)	60%	77%
Percentage of children 6–59 months living in households with iodized salt	NA	96%*

NA: Not Available

*Salt was tested in 84 percent of households. Among households in which salt was tested, 96 percent were consuming iodized salt.

Global and Regional Commitment to Nutrition and Agriculture

Zambia has made the following global and regional commitments to nutrition and agriculture:

Year of Commitment	Name	Description
2012	Ending Preventable Child and Maternal Deaths: A Promise Renewed	Zambia pledged to reduce under-5 mortality to 20 or fewer deaths per 1,000 live births by 2035 by reducing the leading preventable causes of child mortality, including undernutrition (A Promise Renewed 2017).

2011	Comprehensive Africa Agriculture Development Programme (CAADP) Compact	CAADP is an African-led program bringing together governments and diverse stakeholders to reduce hunger and poverty and promote economic growth in African countries through agricultural development. CAADP is congruent with the government's Sixth National Development Plan (SNDPP), and fits in Zambia's Vision 2030 target of becoming a middle-income country.
2010	Scaling Up Nutrition (SUN) Movement	SUN is a global movement that unites national leaders, civil society, bilateral and multilateral organizations, donors, businesses, and researchers in a collective effort to improve nutrition. UNICEF and DFID are the donor conveners for SUN in Zambia. The Civil Society, Donor, and Business Networks are active in Zambia, and members of parliament have been oriented on food and nutrition issues and asked to act as nutrition champions in their respective constituencies (SUN 2017).

National Nutrition Policies/Legislation, Strategies, and Initiatives

Zambia's commitment to improving nutrition is outlined in the following documents, which aligns with the country's Vision 2030:

- National Health Strategic Plan (2011)
- National Food and Nutrition Strategic Plan (2011)
- National Agriculture Investment Plan (2014–2018)
- National Agricultural Policy
- Marketing of Breastmilk Substitutes (2006)
- National AIDS Strategic Framework (2011)
- First 1,000 Most Critical Days Program

A National Food and Nutrition Strategic Plan is coordinated by the National Food and Nutrition Commission (NFNC), the designated convening body to coordinate action on nutrition. A Cooperating Partner Nutrition Group includes development partners and United Nations agencies that provide financial and technical support for nutrition-related programming. Both direct nutrition interventions and nutrition-sensitive programs have been aligned around five priorities of the First 1,000 Most Critical Days Program, now in its second iteration. Zambia's Statutory Instrument No. 48 of 2006 promotes and protects breastfeeding and regulates the unauthorized or unsolicited sale and distribution of breast milk substitutes.

The national multi-stakeholder platform continues to convene meetings with all SUN Networks. Provincial Nutrition Coordinating Committees (NCCs) have been established in seven provinces and multisectoral nutrition plans are developed. District NCCs have been formed in districts beyond the current SUN-funded districts (SUN 2017).

USAID Programs: Accelerating Progress in Nutrition

As of January 2018, the following USAID programs were active in Zambia. Feed the Future, the U.S. Government's global hunger and food security initiative, emphasizes agriculture as a driver of economic growth through a strategy that encompasses five core investment areas: agriculture, nutrition, policy, infrastructure, and institutional capacity. In Zambia, Feed the Future programs are being implemented in Eastern Province, with a value chain focus on oilseeds, legumes, and maize, and in selected peri-urban districts near Lusaka that connect to Eastern Province, with a focus on horticulture.

Selected Projects and Programs Incorporating Nutrition in Zambia		
Name	Dates	Description

Scaling Up Nutrition - Technical Assistance (TA)	2018–2024	The project’s aim is to reduce malnutrition among children under 5 with a significant focus on stunting during the first 1,000 days of life through an integrated approach that incorporates agricultural production, livelihoods, nutrition and hygiene-related behaviors, access to clean water and sanitation, and robust linkages between communities and health facilities for referrals and routine health care.
Scaling Up Nutrition - Learning and Evaluation (LE)	2018–2024	The activity will work across SUN 2.0 to collaboratively identify, design, and test cutting-edge solutions to more effectively understand and measure activity outcomes and impacts that accelerate achievement of the Zambian Government’s and Cooperating Partner’s joint development goal to reduce stunting. While this activity will provide important benchmarks of success for SUN TA, the primary purpose of SUN LE is to be the learning and evaluation arm of the entire SUN program and to work across stakeholders to develop and execute a highly-focused learning agenda around stunting in Zambia.
Systems for Better Health Program	2015–2019	The objective of the program is to improve health outcomes for Zambians by strengthening systems that underpin the delivery of high-quality health services and increasing the utilization of high-impact health interventions at district and community levels. The program improves national-level planning, implementation, and monitoring of essential nutrition actions.
Partnering for Innovation	2016–2018	Innovation Labs including those focused on legumes, food security policy, horticulture, peanut productivity and mycotoxin control, and soybean value chain research creates partnerships between US-based universities and private sector companies with local specialists to develop state-of-the-art techniques.
Development Credit Authority (DCA)	2012–2018	The program uses risk-sharing agreements to mobilize local private capital to fill the financing gap to support local farmers.
Africa Rising	2015–2018	The project’s aim is to improve crop varieties and technologies, promote bio-fortified maize and orange-fleshed sweet potatoes, and pursue aflatoxin reduction in maize and groundnuts.

References

A Promise Renewed. 2017. “Zambia.” Available at: <http://www.apromiserenewed.org/countries/zambia/>

Central Statistical Office (CSO), Ministry of Health (MOH), Tropical Diseases Research Centre (TDRC), University of Zambia, and Macro International Inc. 2009. *Zambia Demographic and Health Survey 2007*. Calverton, Maryland, USA: CSO and Macro International Inc.

Central Statistical Office (CSO) [Zambia], Ministry of Health (MOH) [Zambia], and ICF International. 2014. *Zambia Demographic and Health Survey 2013–14*. Rockville, Maryland, USA: Central Statistical Office, Ministry of Health, and ICF International.

Fink, G., Sudfeld, C.R., Danaei, G., Ezzati, M., and Fawzi, W.W. 2014. “Scaling-Up Access to Family Planning May Improve Linear Growth and Child Development in Low and Middle-Income Countries.” *PLoS ONE* 9(7): e102391. Doi: 10.1371/journal.pone.0102391.

Government of the Republic of Zambia, Ministry of Health. 2012. *Zambia National Malaria Indicator Survey 2012*.

Government of the Republic of Zambia, Ministry of Health. 2015. *Zambia National Malaria Indicator Survey 2015*.

Sachs, J., Schmidt-Traub, G., Kroll, C., Durand-Delacre, D., and Teksoz, K. 2017. *SDG Index and Dashboards Report 2017*. New York: Bertelsmann Stiftung and Sustainable Development Solutions Network (SDSN).

SUN. 2017. "Zambia." Available at: <http://scalingupnutrition.org/sun-countries/zambia/>

UNICEF. 2017. *The State of the World's Children 2017*. Available at: <https://www.unicef.org/sowc/>

USAID. 2017. "Country Profile: Zambia." Available at: <https://feedthefuture.gov/country/zambia>

World Bank. 2017. "Zambia Country Overview." Available at: <http://www.worldbank.org/en/country/zambia/overview>

Zambia Ministry of Agriculture, Livestock and Fisheries. 2011. "Sector Profile." Available at: <file:///C:/Users/tkovach/Downloads/Sector%20Profile%20-%20Agriculture.pdf>