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Guatemala: 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 policymakers in Guatemala, because Guatemala has the fifth-highest rate of stunting (low height-for-age) in the world and the highest in Latin America and the Caribbean, at 47 percent, with the prevalence reaching around 70 percent in Totonicapán, Quiché, and Huehuetenango—indigenous areas of Guatemala. Less than 1 percent are acutely malnourished or wasted (have low weight-for-height) according to the 2014–15 Demographic and Health Survey (DHS) (MSPAS, INE, and ICF International 2017; UNICEF 2019).

Background

According to the World Bank (2019), Guatemala has the largest economy in Central America and one of the strongest economies in Latin America, with an average gross domestic product (GDP) growth rate of about 3.0 percent in the past three years. However, it is also one of the few countries in the region where poverty has increased in recent years, from 51 percent in 2006 to 59 percent in 2014, and around two-thirds of the population live on less than U.S.\$2.00 a day (World Bank 2019; WFP 2019a). In addition, Guatemala has high levels of inequality, with indigenous populations (which comprise about 40 percent of the total population) often having much worse rates of poverty, malnutrition, and mortality, and reduced access to education and health services (MSPAS, INE, and ICF International 2017). Guatemala is one of 10 countries most vulnerable to natural disasters and it has been greatly affected by climate change (WFP 2019a). Over the past three years, longer dry seasons have negatively impacted subsistence farmers who rely on rain-fed agriculture for their crops, pushing marginal households into acute food insecurity. In 2016, 900,000 people needed food assistance (WFP 2019a). In addition, poor soil conditions, over-exploitation of forest resources, degraded lands, small plots of land, and lack of access to credit, agricultural supplies, and technical assistance all reduce agricultural productivity (WFP 2019a).

Currently, Guatemala ranks 121st out of 162 countries in progress toward meeting the Sustainable Development Goals (SDGs) (Sachs et al. 2021). According to the most recent DHS, the neonatal mortality rate is 18 per 1,000 live births, the infant mortality rate is 30 per 1,000 live births, and the under-five mortality rate is 39 per 1,000 live births (MSPAS, INE, and ICF International 2017). In Guatemala, the government spends only 5.8 percent of its GDP on health (WHO 2017).

Nutrition and Food Security Situation

In Guatemala, 47 percent of all children under five years are stunted, according to the most recent DHS (2014–15). However, national stunting data hide the significant disparities in the country, with stunting reaching around 70 percent in Totonicapán, Quiché, and Huehuetenango (highly indigenous areas of the country). In addition, stunting prevalence increases with age, peaking at 55 percent among children 18–23 months, indicating that poor complementary feeding and hygiene and sanitation practices are likely contributors to stunting in that age group (MSPAS, INE, and ICF International 2017). There is a huge disparity in stunting according to maternal education and wealth levels—27 percent of children whose mothers have secondary education are stunted, while the prevalence rises to 67 percent of children whose mothers have no formal education. Similarly, 17 percent of children in the highest wealth quintile are stunted, while 66 percent of children in the lowest wealth quintile are stunted. Socio-economic conditions and reproductive patterns are associated with increased stunting in children under five years in Guatemala; it is higher in indigenous populations (58 percent) and when the birth interval is less than 24 months (57 percent).

Nationally, stunting has only improved slightly from 2008–2009, when it was 50 percent (MSPAS 2011). Wasting among children under five is not a significant problem currently in Guatemala at less than 1 percent (MSPAS, INE, and ICF International 2017). The percentage of underweight children under five in 2014–2015 was 12.6 percent, although 2.1 percent of all children in Guatemala are severely underweight. The percentage of underweight children decreases as mother's education and wealth quintile increases (MSPAS, INE, and ICF International 2017).

In Guatemala, much of childbearing begins in adolescence, which contributes to the high prevalence of low birth weight (15 percent); which, in turn, contributes to the high prevalence of stunting among children under five years (MSPAS, INE, and ICF International 2017). About 41 percent of adolescent girls either have given birth or are pregnant with their first child by the age of 19, which has remained relatively stagnant since 2008 (MSPAS, INE, and ICF International 2017; MSPAS 2011). The high prevalence of adolescent pregnancy 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. Adolescent fertility also contributes to the high prevalence of stunting in the country, as the risk of stunting is 63 percent higher among first-born children of girls under 18 years in Latin America and the Caribbean (Fink et al. 2014).

Maternal short stature, a determinant of childhood stunting, is also a significant problem; nationally, 25 percent of women are shorter than 145 centimeters, and this prevalence rises to 37 percent among indigenous women (MSPAS, INE, and ICF International 2017). In addition, overweight/obesity is highly prevalent in Guatemala, with 52 percent of women of reproductive age either overweight or obese (MSPAS, INE, and ICF International 2017).

Suboptimal infant and young child feeding practices are common in Guatemala; although most children are breastfed (97 percent), only 63 percent are breastfed within an hour of birth, and only 53 percent of children under six months are exclusively breastfed; by 4–5 months of age, 44 percent are exclusively breastfed (MSPAS, INE, and ICF International 2017). In addition, among breastfed children 6–23 months, 86 percent were fed the minimum number of times in the previous 24 hours (minimum meal frequency), 59 percent were given foods from four or more food groups, and 56 percent were given foods from four or more groups and fed the minimum number of times per day (minimum acceptable diet). A lack of knowledge of and access to a healthy, diverse diet contributes to the high malnourishment levels in Guatemala. Among breastfed children 6–23 months, 37 percent consumed meat, fish, or poultry in the previous 24 hours, compared to 90 percent who consumed grain-based foods such as maize. This is a concern given possible high aflatoxin and fumonisin levels in the country (MSPAS, INE, and ICF International 2017).

Due to the fortification of sugar with vitamin A in Guatemala (which has been in place since 1975), vitamin A deficiency has been virtually eliminated and is very low at 0.3 percent¹ (MSPAS 2012). According to the National Maternal and

¹ Percentage of children 6–59 months of age with serum retinol < 20 µg/dL.

Child Health Surveys (ENSMI), while anemia prevalence has dropped substantially from the 2008–2009 ENSMI where 48 percent of children under five years were anemic, anemia still affects around 32 percent of children under five years (reaching between 58 and 70 percent during key complementary feeding ages: 9–17 months), 24 percent of pregnant women, and 14 percent of all women of reproductive age (MSPAS 2011; MSPAS, INE, and ICF International 2017). Different national sources of data show positive trends for iron deficiency anemia. However, this public health issue requires a multi-sectoral response.

The Integrated Classification of Food Safety in Phases (CIF) Report on the Guatemala Acute Food Insecurity Analysis (May 2021–January 2022) from the Central American Integration System (SICA) (2021), estimates that “During the seasonal hunger period, from May to August 2021, about 3.5 million people are in Crisis or Emergency and require urgent actions. This number is projected to decline to 2.5 million, during the period of least food insecurity between September 2021 and January 2022.” The report adds that “The most vulnerable population are infra and subsistence agricultural households with income losses due to damages caused by the ETA and IOTA storms during the month of November 2020, small informal traders, agricultural day laborers affected by the limitations derived from the COVID-19 pandemic.” (SICA 2020)

Guatemala Nutrition Data (ENSMI 2008–2009 and 2014–2015)		
Population 2018 (UNICEF 2019)	17.2 million	
Population under 5 years (0–59 months) 2018 (UNICEF 2019)	2 million	
	2008–2009	2014–2015
Prevalence of stunting among children under 5 years (0–59 months)*	50%	47%
Prevalence of underweight among children under 5 years (0–59 months)*	13%	13%
Prevalence of wasting among children under 5 years (0–59 months)	1%	<1%
Prevalence of low birth weight (less than 2.5 kg) (of children whose birth weights are known)	11%	15%
Prevalence of anemia among children 6–59 months	48%	32%
Prevalence of anemia among women of reproductive age (15–49 years)**	23%	14%
Prevalence of thinness among women of reproductive age (15–49 years) (body mass index less than 18.5 kg/m ²)***	2%	1%
Prevalence of thinness among adolescent girls (15–19 years)***	6%	7%
Prevalence of children 0–5 months exclusively breastfed	50%	53%
Prevalence of children 4–5 months exclusively breastfed	NA	44%
Prevalence of early initiation of breastfeeding (i.e., put to the breast within 1 hour of birth)	56%	63%
Prevalence of children who receive a pre-lacteal feed	NA	36%
Prevalence of breastfed children 6–23 months receiving minimum acceptable diet	NA	56%
Prevalence of overweight/obesity among children under 5 years (0–59 months)	NA	5%
Prevalence of overweight/obesity among women of reproductive age (15–49 years)***	51%	52%
Coverage of iron for pregnant women (for at least 90 days)	NA	29%
Coverage of vitamin A supplements for children (6–59 months, in the last 6 months)	NA	50%

NA: Not Available

*2008–2009 ENSMI used 3–59 months as the age group

** Weighted average calculated for pregnant and non-pregnant women

*** Only among women who had a child(ren) within the last 5 years

Global and Regional Commitment to Nutrition and Agriculture

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

Year of Commitment	Name	Description
2010	Scaling Up Nutrition (SUN) Movement	In 2010, Guatemala joined SUN, a global movement that unites national leaders, civil society, bilateral and multilateral organizations, donors, businesses, and researchers in a collective effort to improve nutrition. The donor conveners are the World Food Program (PMA-ONU) and the Inter-American Development Bank (IDB). Priorities for 2017–2018 include producing guidelines that will enable a common results framework; including nutrition advocacy to promote further investment in nutrition and improved data collection; developing, updating, and implementing advocacy and communication strategies; and involving a representative from marginalized and vulnerable communities, among others (SUN 2017).

National Nutrition Policies/Legislation, Strategies, and Initiatives

Guatemala's commitment to improving nutrition is outlined in the following documents and is in line with the Government's 2032 Vision and Policy (2016–2020):

- National Plan for Food Security and Nutrition (PESAN) 2016–2020
- Seasonal Hunger Response Plan of the Food Security and Nutrition Secretariat (2016)
- Central American Technical Regulation RTCA 61.01.60: 10 - Nutrition Labeling of Prepackaged Food Products for Human Consumption for the Population from 3 Years of Age (2012)
- Law on School Feeding (2017)
- Law for Safe Motherhood (2010)
- National Policy on Food and Nutrition Security (2005–2015)
- Law and Regulations of the National System of Food and Nutrition Security (2005)
- National Strategy for the Prevention of Chronic Malnutrition (ENPDC) (2016–2020)
- The Great National Crusade for Nutrition (GCNN) (2020)
- Family Agriculture Programme to Strengthen the Rural Economy (2016–2020)
- Acute Malnutrition Epidemiological Surveillance Protocol (2018)
- Central American Technical Regulation RTCA 67.01.15.07 Flours. Fortified Wheat Flour Specifications (2007)
- Consultation process for updating the National Food and Nutrition Security Policy (2021)
- Promotion of the approval of the initiative of Law 5504 "Law for the Promotion of Healthy Eating" (October 2018)
- The Great National Crusade for Nutrition GCNN Baseline Study (2021)

The Government of Guatemala (GOG) has committed to intensifying efforts to reduce stunting and other forms of malnutrition. There is high-level commitment and momentum for multi-sectoral action on nutrition in Guatemala, as demonstrated by the Government's National Secretariat for Food Security and Nutrition (SESAN), which is tasked with oversight of the National Plan for Food Security and Nutrition (PESAN) 2016–2020 and supported by several ministries, such as Health (MSPAS), Education (MINEDUC), Social Development (MIDES), Agriculture (MAGA), and Finance (MINFIN). The plan seeks to increase the annual budget related to food security and nutrition by 2.5 percent, as well as strengthen the existing system to fight malnutrition. The government committed to tackle malnutrition by implementing the Great National Crusade for Nutrition, which has five priority areas to reach the goal of reducing malnutrition by 5–7 percentage points. The priority areas include (1) preventing chronic malnutrition and anemia, (2) reducing mother-and-child morbidity and mortality, (3) promoting food security and nutrition among the Guatemalan population, (4) strengthening basic health care services across the country to ensure they receive basic drugs and supplies in a sustained and timely manner, and (5) preventing infectious and chronic diseases. In its first phase, this plan will focus on 10 departments and 113 municipalities.

The Epidemiological Health and Nutrition Surveillance System (SIVESNU, for its initials in Spanish), is a 10-year population-based household nutrition and health surveillance system set up in Guatemala. After design and testing of a prototype, stakeholders and partners—Centers for Disease Control and Prevention (CDC), USAID, Institute of Nutrition for Central America and Panama (INCAP), and recently United Nations Children's Fund (UNICEF)—expanded the content, and organized and funded surveillance cycles in 2013, 2015, 2016, 2017/18, and 2018/19. These cycles have provided nationally representative data for households, women of reproductive ages 15–49 years, and children 0–59 months. The flexible design allows managers to add new content and groups based on priorities and funding. Data has been used in changing national guidelines for vitamin A, B12, and oral health interventions. Given its proven strengths and accomplishments, the GOG decided to use the SIVESNU model to carry out a baseline study of the National Nutrition Strategy (*Gran Cruzada Nacional por la Nutrición*). Preliminary results will be available at the end of 2021 and will also provide information on the effect of the COVID-19 pandemic on chronic malnutrition.

In coordination with the Ombudsman Office, indigenous civil society networks apply digital tools developed to conduct social accountability and monitoring of nutrition services and commodities. They have been elected to represent the indigenous, women, and peasant sectors in the National Council for Food and Nutrition Security (CONASAN). The CONASAN is chaired by the vice president of the republic and the secretary of SESAN is the governing body of Security Alimentary and Nutritional (SAN). It brings together the ministries, the business sector, and civil society to promote actions that promote SAN. The Ministry of Public Health and Social Assistance has established the protocol for the surveillance of acute malnutrition, which has made it possible to improve the opportunity and registration of cases. The factors associated with this crisis are the COVID-19 pandemic, price of food, depletion of basic grain reserves, and loss of jobs and income.

USAID Programs: Accelerating Progress in Nutrition

As of May 2021, the following USAID programs with a focus on nutrition were active in Guatemala. The U.S. Government selected Guatemala as one of 12 Feed the Future target countries for focused investment under the new U.S. Government Global Food Security Strategy.

Selected Projects and Programs Incorporating Nutrition in Guatemala		
Name	Dates	Description
Breakthrough Action	2020–2022	To promote a well-nourished population, USAID, through its health and nutrition interventions, will continue to focus on promoting social behavior change (SBC) interventions that improve health outcomes by increasing the population demand and awareness in accessing health care services when prompted. SBC interventions will encourage behaviors related to potable water supply, sanitation, and hygiene (WASH); optimal nutrition-specific and nutrition-sensitive practices, health care-seeking behaviors for maternal, neonatal, child, adolescent and reproductive health (MNCARH); family planning; and growth monitoring during the critical first 1,000 days. This activity will complement the efforts being carried out by Feed the Future on nutrition-sensitive activities with the intent of reducing stunting through the design, validation, and implementation of behavior change messages.
Communities Leading Development Project	2016–2021	The project will work to improve the quality of life for vulnerable populations, including women, indigenous people, youth, and people with disabilities in some of Guatemala’s most marginalized communities. Communities Leading Development will work with 200 communities in the five departments targeted by USAID, including Huehuetenango, Quetzaltenango, Quiché, San Marcos, and Totonicapán, to support communities in creating and transparently implementing their own development plans over 5 years, through 2021. The project aims to empower communities by participating in the development and implementation of community development plans, identifying and prioritizing community needs and assets, improving resilience through strengthened community social cohesion, and building alliances with the public and private sector for community development at scale.
Feed the Future	Ongoing	Feed the Future projects support community health workers, community leaders, indigenous citizen advocacy groups, and women’s groups to improve healthy behaviors and reduce chronic malnutrition. Feed the Future helps to increase families’ access to clean water, improve treatment of childhood diarrhea, expand child growth monitoring and prenatal care, and teach families how to grow and prepare nutritious foods at home. Feed the Future also works at the national level to improve food security policies and educate leaders on the prevalence and effects of chronic undernutrition, as well as to strengthen national food security monitoring, data collection, and evaluation of the impacts of nutrition interventions. In addition the Feed the Future projects supports families through a Nutrition Sensitive Agriculture approach, where agriculture investments are made to improve nutrition. Agricultural investments are appropriately planned to yield impact on nutritional status and, consequently, improve health and well-being.

<p>Feed the Future Feed the Future Guatemala Innovative Solutions for Agricultural Value Chains (PRO- INNOVA)</p>	<p>2017–2022</p>	<p>The objectives of this project are to increase agricultural incomes and improve resilience for small farmers and their families in five departments of the Western Highlands, while improving nutrition outcomes. This will be achieved through—</p> <ul style="list-style-type: none"> • Improving agricultural productivity and diversifying income generation alternatives • Expanding access to markets • Increasing resilience by implementing climate-smart agriculture • Improving the nutritional status of focus populations, especially for women and children • Strengthening the agriculture and food security enabling environment <p>The project will measure success through reductions in poverty, including the change in the depth and prevalence of poverty in target households over the 5 years of project implementation. The projects will also measure the change in household income from the agriculture sector among target households over the course of the projects.</p>
<p>Health and Education Policy Plus (HEP+)</p>	<p>2015–2022</p>	<p>HEP+ works to strengthen the governance, quality, and equity of health and nutrition services and addresses the gaps in access to services, low government investment, and effective use of public resources. The project supports the government's targeted health sector reform efforts while focusing on civil society and governance and central-level planning and policies in the education, nutrition, and health sectors (Health Policy Plus 2016).</p>
<p>Improved Health and Nutrition Activity</p>	<p>2020–2025</p>	<p>This mechanism will support sustainable improvements in the health and nutritional status of women and children in selected rural indigenous communities. Households with pregnant women and children within the 1,000 days will be a primary, though not the exclusive focus, of this mechanism. The mechanisms will apply a technically sound health system strengthening approach to enable and strengthen the GOG's capacity to deliver an integrated and culturally sensitive package of health and nutrition maternal, newborn, child, and adolescent health, and family planning services. This mechanism will provide technical assistance to (1) improve access to, and utilization of, quality health and nutrition services for select municipalities; and (2) strengthen the local health systems, human resources for health, and governance of the health sector. Civil society representatives and community health workers will monitor services by applying digital solutions. This activity will support the implementation of GOG's National Crusade for Nutrition, which addresses malnutrition.</p>
<p>Increasing Agricultural Incomes and Productivity to Deter Illegal Immigration (Feed the Future Guatemala Coffee Value Chain Project)</p>	<p>2017–2022</p>	<p>This activity supports sustainable coffee production through training and assistance to small-scale coffee producers, implements a comprehensive approach that increases incomes, strengthens farmers' families' access to a diversified diet, and improves nutritional conditions. USAID promotes technological innovation to improve the production and productivity of the coffee value chain, contributes to organizational strengthening, and improves competitiveness to bring producers from high outward migration departments to differentiated markets. USAID assistance improves resilience through friendly environmental and nutrition-sensitive agricultural practices. USAID assistance will improve household nutrition by increasing the availability of animal and vegetable protein with high nutrient content. Small coffee producers will diversify their cropping systems to access more</p>

		markets, consume a diversified diet, and be less vulnerable to climate variability, crop pests and diseases, and market shocks. This includes establishing more than 35 Learning Paths (a community space where farmers increase their knowledge and exchange experiences within coffee cooperatives located in the Western Highlands). A Learning Path is a cost-effective solution that will permanently serve and support small coffee producers and their families for nutrition and income-generation activities.
Research grant to the International Food Policy Research Institute (IFPRI)	2011–2024	<p>To inform and provide timely information for decision-making to the Mission and other relevant stakeholders in the country, IFPRI will target, monitor, and evaluate activities related to poverty, food security, nutrition, and migration.</p> <p>Through this mechanism, USAID will continue to support the efforts of the GOG to monitor and evaluate the implementation of the National Crusade for Nutrition 2020–2024. USAID will continue to evaluate the impact of Feed the Future value chain activities as it relates to the nutritional status of target beneficiaries, with a focus on animal-source food production and social and behavior change communication.</p>
Rural Extension Project in Guatemala, Participating Agency Program Agreement (PAPA)	2017–2022	To improve food production and increase incomes in rural areas leading to reduced illegal migration, USAID is partnering with the Peace Corps to strengthen the national agricultural extension system. USAID and the Peace Corps will continue to provide capacity building for municipal extension agents and community agricultural promoters, including methodologies for planning, organization, management, and effective delivery of rural extension services. The Peace Corps volunteers and staff’s efforts will focus on adult learning and engagement techniques, which are not usually part of agriculture curricula in Guatemala. These activities will be implemented with the collaboration of and in coordination with local communities, the GOG through the Ministry of Agriculture representatives, and local and international nongovernmental organizations.
Coffee Value Chains Project and Puentes Project	2017–2022	USAID will also support young agribusiness entrepreneurs (agricultural input suppliers) and train youth on the production of nutrition-dense foods for consumption or sale in niche markets.

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