

**Global Food Security Strategy  
(GFSS)**

**Guatemala Country Plan**

**March 9, 2018**

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## Acronyms

CACIF	Coordinating Committee of Agricultural, Commercial, Industrial and Financial Associations
CC	Cross Cutting
CGIAR	Consultative Group for International Agricultural Research
CLA	Collaborating, Learning and Adapting
CONASAN	National Council on Food and Nutritional Security
ENPDC	National Strategy to Prevent Chronic Malnutrition
FSMA	U.S. Food Safety Modernization Act
FUNDESA	Foundation for the Development of Guatemala
GFSS	Global Food Security Strategy
GIA	Group of Supporters
GOG	Government of Guatemala
G-SAN-DR	Donors and Cooperating Agencies on Food Security, Nutrition, and Rural Development
IAF	Inter-American Foundation
ICT	Information and Communication Technology
IFPRI	International Food Policy Research Institute
INCOPAS	Advisory Council for Social Participation
IR	Intermediate Result
MAGA	Ministry of Agriculture
NARS	National Agricultural Research System
NGO	Non-Governmental Organizations
PESAN	Food Security and Nutrition Strategic Plan
SBC	Social and Behavior Change
SESAN	Secretariat of Food and Nutritional Security
SINISAN	National System for Food Security and Nutrition
SPS	Sanitary and Phytosanitary
USDA	U.S. Department of Agriculture
USG	U.S. Government

WASH	Water, Sanitation and Hygiene
ZOI	Zone of Influence

## **Introduction**

The Global Food Security Strategy (GFSS) Country Plan for Guatemala was co-written with by U.S. Government (USG) interagency involved in food security and nutrition work after extensive consultation with stakeholders from government ministries, private companies, universities, research institutes, international and local Non-Governmental Organizations (NGO), donors and international organizations and was given extensive review and commentary by USG interagency partners in Washington, DC. As a living document, it is intended to be updated as needed in consultation with those parties over time.

The GFSS Country Plan serves as an overarching framework for integrated food security and nutrition programming. The plan is intended to describe the key drivers of food insecurity, malnutrition and poverty. These key drivers stem from a complex set of underlying conditions that exist at the individual, household, community and system level. At the design and procurement stages, the targeting, results framework and program components will require further refinement to operationalize integrated and holistic approaches. Interventions at all levels will need to work in complement to each other to sustainably tackle food insecurity, malnutrition and poverty. In particular, the most vulnerable and poor populations do not have sufficient assets, skills, and capabilities to participate in market operations. These populations will need to be supported to develop capacity over time to participate in value chains so that they can become a viable livelihood option. As GFSS programming is refined through the design, procurement and implementation processes, selected value chains will explicitly prioritize inclusive growth and interventions will include support to the most vulnerable and poor populations to enable them to graduate into selected value chains and benefit from the GFSS-supported livelihoods and market development.

Budget assumptions for interagency contributions to this plan reflect the FY 2017 estimate and FY 2018 President's Budget, based on information publicly available at the time this document was prepared. Out year budget assumptions reflect a straight-line to the FY 2018 President's Budget. Any funding beyond FY 2017 is subject to the availability of funds, as determined by the President's Budget and a Congressional appropriation. Budget assumptions may require revision in the future, based on future President's Budgets.

## Guatemala Food Security Strategy Country Plan

The GFSS Country Plan for Guatemala 2018-2022, implemented by the Feed the Future initiative, is a result of extensive coordination between agencies of the USG, the Government of Guatemala (GOG), civil society stakeholders, and international donors. The Guatemala GFSS Country Plan focuses on strengthening the vertical links from GOG policy to community-level implementation of programs and services, and the network of value chains and civil society within the Feed the Future Zone of Influence (ZOI). It builds on poverty reduction successes of the first phase of Feed the Future, while further elevating efforts that address stunting.<sup>1</sup> The GFSS for Guatemala aligns directly with the goals of the Prosperity pillar of the U.S Strategy for Central America and supports the GOG's Plan for the Alliance for Prosperity in the Northern Triangle.

### Section A. Food Security and Nutrition Context

#### A.1. Poverty, Hunger, and Malnutrition Statistics, Trends, and Drivers

Guatemala is a lower-middle income country, as measured by the gross domestic product per capita; however, 59.3 percent of the population lives in poverty.<sup>2</sup> Extreme inequality and social exclusion, which stratify society along indigenous/non-indigenous, rural/urban, and gender lines, compound the problem. Rural areas have almost twice the poverty rate of urban areas. Extreme poverty in rural areas increased from 15.7 percent in 2000 to 23.4 percent in 2014 compared to the change in urban areas from 2.8 percent to 11.2 percent during the same period.<sup>3</sup> The increase in the urban poverty rate is likely due to increased rural-urban migration without a corresponding increase in job opportunities.<sup>4</sup> The poor in rural areas rely heavily on casual employment and are thus subject to high seasonal variation in income levels, as a result of climate variability, crop pests and diseases (like coffee rust), and changing market prices.<sup>5</sup> Overall, the lack of substantial progress in reducing poverty can be attributed to a lack of productive investment (e.g., extension programs, transportation, electrical infrastructure etc.), as well as, spending on social safety net programs to buffer against unemployment, seasonal stressors, and other shocks.<sup>6,7</sup>

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<sup>1</sup> Stunting is defined as low length/height per age as compared with WHO reference standards of children growing under optimal conditions. Stunting is frequently used as synonym of chronic undernutrition, which is one of its causes. However, as in Guatemala other causes may be equally important, in this document the word stunting is used to denote clearly that a multi-sectoral approach is required to tackle it.

<sup>2</sup> Instituto Nacional de Estadísticas, 2016. *Encuesta Nacional de Condiciones de Vida ENCOVI 2014*.

Poverty decreased between 2000 and 2006, but then increased between 2006 and 2014. Poverty is measured against a poverty line drawn against a basic basket of goods and services needed by a typical household.

<sup>3</sup> Ibid.

<sup>4</sup> IFPRI, 2017. *Context and Targeting Analysis for Guatemala*.

<sup>5</sup> FEWSNET, 2016. *Guatemala Livelihood Profile*.

<sup>6</sup> World Bank, *Country Poverty Brief*. October 2017.

<sup>7</sup> FEWSNET, 2017. *Guatemala Food Security Outlook*.

Despite high levels of poverty, wasting is non-existent or very rare.<sup>8</sup> Additionally, women from all regions and ethnic groups suffer from overweight and obesity (52 percent), while prevalence of too thin women is negligible. One explanatory theory is that there is sufficient access to calories for children and women at their current heights and activity levels. However, the low rates of wasting and underweight are not evidence of food security (the physical, social and economic access to sufficient safe and nutritious food that meets dietary needs).

In Guatemala, stunting of boys and girls between 6 and 59 months of age decreased nationally from 50 percent in 2008-2009<sup>9</sup> to 47 percent in 2014-2015,<sup>10</sup> in rural areas from 59 percent in 2008-2009 to 53 percent in 2014-2015, and among indigenous populations from 66 percent in 2008-2009 to 58 percent in 2014-2015.<sup>11</sup> However, these rates are far above what is expected for a lower-middle income country and are the highest in Latin America, making Guatemala an anomaly when it comes to decreasing stunting. A study of Guatemalan adults found that those who were stunted as children had less total schooling, lower test performances, lower household per capita expenditure, and a greater likelihood of living in poverty.<sup>12</sup> This association does not signify causality, rather the same causes of stunting also negatively impact the other indicators of human development. Stunting is an inter-generational phenomenon; reducing stunting in Guatemala requires improving the health and nutritional conditions of mothers during pregnancy and lactation, and during the infancy, childhood, and adolescent years of girls. In Guatemala, stunting is closely correlated to the mother's height, as well as child length at the moment of birth.<sup>13</sup>

Breastfeeding practices in the Western Highland are better than the national rates for early initiation and exclusive breastfeeding, yet there is still room for improvement in order to confer optimal health benefits and prevention of morbidity and child and maternal mortality. Moreover, optimal breastfeeding depends on the mother's own health and nutritional status, as well as her time and energy for dedicating quality time to her child. Cultural beliefs around early breastfeeding practices are also common in the Western Highlands and result in prelacteal feeds, defined as foods or liquids other than breastmilk being introduced in the first three days after birth.

The factors contributing to these high rates of stunting are multi-faceted<sup>14</sup>, including: poor dietary diversity, poor infant and young child feeding practices, and a lack of access to clean water and improved

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<sup>8</sup> Wasting is low weight for height as compared with WHO reference standards of children growing under optimal conditions. A normal population presents "wasting" rates below 2.5%. In Guatemala, "wasting" was 0.7% at the national level, and lower than 1% in all strata, in 2015 (ENSMI-2015).

<sup>9</sup> Ministerio de Salud Pública y Asistencia Social. 2010. Encuesta Nacional de Salud Materno Infantil 2008 (ENSMI- 2008/09). Guatemala: MSPAS/Instituto Nacional de Estadística (INE)/Centros de Control y Prevención de Enfermedades (CDC).

<sup>10</sup> Ministerio de Salud Pública y Asistencia Social. 2017. Encuesta Nacional de Salud Materno Infantil 2014 (ENSMI- 2014/15). Guatemala: MSPAS/Instituto Nacional de Estadística (INE)/Centros de Control y Prevención de Enfermedades (CDC). <http://dhsprogram.com/pubs/pdf/FR318/FR318.pdf>

<sup>11</sup> Ibid.

<sup>12</sup> Hoddinott J, Alderman H, Behrman JR, Haddad L, Horton S. The economic rationale for investing in stunting reduction. *Matern Child Nutr.* 2013;9(Suppl. 2):69–82. doi:10.1111/mcn.12080.

<sup>13</sup> Solomons *et al.*, Stunting at birth: recognition of early-life linear growth failure in the western highlands of Guatemala. *Public Health Nutrition* 2014; **18**(10): 1737-1745.

<sup>14</sup> Prendergast and Humphrey. The stunting syndrome in developing countries. *Pediatrics Int Child Health* 2014;**34**:250-265.

sanitation facilities, among others.<sup>15</sup> In addition to targeting these factors, identifying the complex, mixed drivers of malnutrition in Guatemala will provide greater potential to reduce malnutrition and, over time, stunting, countrywide. Poor dietary diversity, as a key contributor to stunting, is one such focus area. Diet consumption is typically maize and beans. A recent decrease in bean consumption and high mycotoxin contamination in maize, compounded with little to no animal sourced foods consumption, has resulted in inadequate consumption of critical nutrients, like protein, zinc, and vitamin B12. Moreover, there is growing evidence that the presence of mycotoxins and chronic exposure to contaminated food and water resources leads to a compromised gastrointestinal tract; and thus, decreased absorption of nutrients from food.<sup>16</sup>

At the national level, 77 percent of the population has access to piped water; in the Western Highlands of Guatemala, it averages 80 percent. Nevertheless, piped water is not synonymous with safe water as most of the water supply has been found to be contaminated with fecal bacteria. Further, at the national level, 58 percent of the population has access to sanitation facilities, but in the Western Highlands it averages only 41 percent.<sup>17</sup> Particularly important is the lack of coverage of primary health care services, as well as the high numbers of 10- to 15-year-olds who give birth, and a lack of healthy timing and spacing between pregnancies.<sup>18,19</sup> These higher fertility rates and larger household sizes in general make obtaining adequate family nutrition difficult.

## A.2. Status of Greatest Constraints within the Food and Agriculture Market System

Guatemalan agriculture is characterized by high geographic and climate variability. Agriculture accounts for approximately one third of the active labor force, but represents a declining portion of GDP (15.1 percent to 11.1 percent from 2011 to 2015). Males dominate the agricultural labor force, making up 88.9 percent of agricultural labor in 2016.<sup>20</sup> Traditional export crops like sugarcane and bananas, as well as, non-traditional palm oil and rubber crops are grown in lowland areas on large-scale farms. Land holdings are highly concentrated, with 57 percent of agricultural land belonging to two percent of commercial producers, mainly growing the aforementioned cash crops for export.<sup>21</sup> In the Western Highlands there is limited diversity within crop production systems and limited numbers of livestock and poultry. This negatively impacts the diversity of production, consumption, and availability in local markets.

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<sup>15</sup> FANTA III, 2017. *Integrating And Strengthening Nutrition In Agriculture And Maternal And Child Health Programs In Guatemala: A Report On Fanta Activities From 2011 To 2017*.

<sup>16</sup> Review: Enteropathies in the Developing World: Neglected Effects on Global Health. Andrew Prendergast\* and Paul Kelly (2012) *Am. J. Trop. Med. Hyg.*, 86(5), 2012, pp. 756–763 and Aflatoxin Exposure during Pregnancy, Maternal Anemia, and Adverse Birth Outcomes, Laura E. Smith,1,2\* Andrew J. Prendergast,2,3,4 Paul C. Turner,5 Jean H. Humphrey,3,4 and Rebecca J. Stoltzfus1 (2017) *Am. J. Trop. Med. Hyg.*, 96(4), 2017, pp. 770–776

<sup>17</sup> ENCOVI, 2015.

<sup>18</sup> United Nations, 2014. *Guatemala: Análisis de Situación del País*.

<sup>19</sup> Evidence shows that short spacing of pregnancies leads to low birth weights associated with a threefold risk of childhood stunting. (USAID Health Policy Project, 2015. *Impact of Family Planning on Nutrition*.) In Guatemala, 47% of births occur in intervals less than 36 months (the minimum optimal birth spacing period).

<sup>20</sup> ILO estimates from M/CIO Economic Analysis and Data Services, 2017. *Analytical Brief: Agriculture in Guatemala*.

<sup>21</sup> M/CIO Economic Analysis and Data Services, 2017. *Analytical Brief: Agriculture in Guatemala*.



Since 2006, with the signing of Central America Free Trade Agreement- Dominican Republic (CAFTA-DR) free trade agreement with the United States (and other trade agreements around this time), the GOG has focused on the production of non-traditional crops for export, like off-season fruits and vegetables.<sup>22,23</sup> In the areas of the Western Highlands and the Dry Corridor (a central strip of Guatemala from the central highlands to the border with Honduras), production of these crops has seen substantial growth, in addition to production of higher-value traditional crops like specialty coffee and cardamom. Despite the growth of non-traditional crops, the vast majority of farmers remain smallholders (92 percent) cultivating low-value staples, such as maize and beans, on less than two hectares.<sup>24,25</sup>

The constraints faced by smallholder farmers and commercial farmers are very different, but some do overlap. Overlapping constraints include poor transportation infrastructure and inadequate storage facilities. The cost of moving goods over main transport corridors is 12 percent above the Central American average.<sup>26</sup> According to The Economist Intelligence Unit's Global Food Security Index in 2016, Guatemala scored a low 28.7 out of 100 for agriculture infrastructure, compared to a regional average of 49.2. Worse, Guatemala received a score of 0 for adequate crop storage, which bears relevance to the high levels of mycotoxin contamination reported for maize.<sup>27</sup> Moreover, lending in the agriculture sector is lower than its corresponding importance in the overall economy and is especially an issue for micro-, small-, and medium-sized enterprises who want to invest in upgrading technology or infrastructure.<sup>28,29</sup>

Notably, for almost all smallholder farmers, casual labor and remittances form an important part of their income.<sup>30</sup> In the geographic areas of coffee and horticulture production, smallholders also produce maize and beans for household consumption, in addition to crops for sale such as coffee, vegetables, fruit, and potatoes. For these smallholder farmers, the production of maize and beans is inefficient, using unimproved varieties, basic production techniques, and poor nutrient management. Production is further limited by very low levels of extension and service provision, although exporters, input suppliers, and private extension (through farmer groups) are providing some services.<sup>31</sup> This smallholder/ mixed-

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<sup>22</sup> Based on FAOSTATS, between 2004 and 2014 leguminous vegetable production increased 274%, chilies and green peppers increased 223%, and pineapples increased 242%.

<sup>23</sup> Luis Linares, Pedro Prado, and Raquel Zelaya, 2013. *Shared Harvests: Agriculture, Trade, and Employment*. World Labor Office.

<sup>24</sup> Ibid.

<sup>25</sup> IFPRI, 2017. Western Highlands Typology Report.

<sup>26</sup> IDB, 2017, *draft Country Strategy 2017-2020*. Accessed <http://idbdocs.iadb.org/wsdocs/getdocument.aspx?docnum=EZSHARE-1869946129-12>

<sup>27</sup> Torres, O., et al. 2015. "Human health implications from co-exposure to aflatoxins and fumonisins in maize-based foods in Latin America: Guatemala as a case study." *World Mycotoxin Journal*, 2015: 8 (2): 143-159.

<sup>28</sup> M/CIO Economic Analysis and Data Services, 2017. *Analytical Brief: Agriculture in Guatemala*.

<sup>29</sup> From IDB 2017 country strategy, "Although MSMEs represent more than 90% of the country's companies, they face serious problems in access to credit. Only 12% of Guatemalan MSMEs have access to financing and when they do obtain financing, it covers only between 15% and 25% of the total investment, one of the lowest coverages in Latin America. This presents an obstacle to improved productivity in these firms as well as to job creation." accessed Nov 30, 2017.

<sup>30</sup> USAID, 2015. *Nutrition, Mortality, Food Security, and Livelihoods Survey Based on SMART Methodology*.

<sup>31</sup> University of California Davis / USAID, 2013. "Advancing Horticulture: Assessment of Constraints to Horticultural Sector Growth in Central America."

subsistence type of production will typically supply a family with only one-third of its income and 3-4 months of staple food, meaning that families rely heavily on market purchase and additional income sources.<sup>32</sup> Moreover, there are many extremely poor households that do not have access to land and are wholly dependent on labor, petty trade, and/or remittances for livelihoods.<sup>33</sup>

Further, Guatemala's agriculture sector is extremely vulnerable to climate variability, although impacting commercial and small-scale farmers differently. Production in Guatemala is susceptible to drought; the El Niño intensified drought in 2014 reduced maize and bean harvests by more than 50 percent in the Western Highlands and eastern Dry Corridor.<sup>34</sup> Since only about 18 percent of agricultural land is irrigated, with 70 percent of that capacity going to produce sugarcane, bananas, and oil palm, the country continues to be at risk.<sup>35</sup> Guatemala's lack of water storage capacity, only being able to store 1.5 percent of its seasonal water production, poses a challenge for agriculture production. Investment for a solution to this problem has not been a priority of the GOG. Smallholder production is often on steep, hilly terrain most at risk for losses and productivity declines due to soil erosion and excess rainfall. Low levels of productivity, coupled with increasing levels of fertilizer use again emphasize the need to improve agriculture management practices for improved soil fertility.<sup>36</sup> Additionally, with rises in temperature, ideal agro-ecological zones for coffee production will shift, requiring adaptation plans and management to mitigate disease outbreaks like coffee rust. For sustainability, it is important to understand, plan for, mitigate, and monitor the impacts of shocks and stresses, especially droughts, floods and invasive pests and animal and plant diseases on household food security.

Women's formal employment in agriculture is low (about 10 percent) and limited by land ownership (women only own about eight percent of land in Guatemala).<sup>37</sup> Moreover, for indigenous women in rural areas, they are not compensated for a large part of their labor -- averaging 6.1 hours/day,<sup>38</sup> and the compensation rate is 11 percent that of men.<sup>39</sup> This is not to say that women are not an important part of the rural economy, just that participation and representation in the formal sector is more limited than that of men. Women designate some hours during the day to agriculture including home gardens and small livestock, as well as handicraft activities that represent part-time, in-house labor in conjunction with other activities including cooking and child care. Women have less access to agriculture extension services and capacity building by public extension and farm associations. Women also have more limited access to credit due to a lack of collateral, and knowledge and confidence to engage with the formal banking sector.

Underlying these constraints is the recurring theme of underinvestment by the GOG on agriculture research and extension, which limits the possibility to increase productivity and diversify production in the face of climate variability and disease threats. Guatemala has successfully reduced many barriers to

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<sup>32</sup> USAID, 2010, "Feed the Future Initiative Achieving Food Security in Guatemala: Opportunities and Challenges." with updates from FEWSNET, 2016. *Guatemala Livelihood Profile*.

<sup>33</sup> FEWSNET, 2016. *Guatemala Livelihood Profile*.

<sup>34</sup> USAID, 2017 "Climate Change Risk Profile - Guatemala"

<sup>35</sup> FAOSTAT

<sup>36</sup> M/CIO Economic Analysis and Data Services, 2017. *Analytical Brief: Agriculture in Guatemala*.

<sup>37</sup> Ibid

<sup>38</sup> United Nations, 2016. *Guatemala*. Retrieved from UN Women. <http://lac.unwomen.org/en/donde-estamos/guatemala>

<sup>39</sup> M/CIO Economic Analysis and Data Services, 2017. *Analytical Brief: Agriculture in Guatemala*.

trade, however analysis suggests that prices of purchased food could be reduced through more efficient regional and international trade, which currently tends to be hampered by non-tariff measures.<sup>40</sup> Additionally, Guatemala's success in exporting non-traditional horticulture crops could be hampered if measures are not taken by the government and exporter associations to institutionalize compliance with sanitary and phytosanitary standards.

### A.3. Partnership Landscape

Despite the low level of public investment in agriculture and food security generally, the GOG has developed a detailed policy agenda and institutional architecture for food security and nutrition. Successive governments have prioritized food security policy and reduction of malnutrition. In 2005, the GOG established the National System for Food Security and Nutrition (SINISAN). The current strategies operating under this law include the 2016-2020 Food Security and Nutrition Strategic Plan (PESAN) and the National Strategy to Prevent Chronic Malnutrition 2016-2020 (ENPDC), which provides a national strategic framework and implementation plan for improving food security and nutrition. The Zero Hunger Pact/Pacto Hambre Cero (2012-2016) was also supported by both successive administrations. Currently, the GOG has two National Water and Sanitation Policies (2011 and 2012); unfortunately, both policies have serious deficiencies for implementation. For this reason, the GOG is designing a new policy that includes roles and responsibilities of key actors and a programmed budget related to water and sanitation topics.

The mechanism for donor coordination is well established in Guatemala. GOG and donor coordination is done formally at the National Council on Food and Nutritional Security (CONASAN) level through the Group of Supporters (GIA) from different organizations who work on food security issues and the Group of Donors and Cooperating Agencies on Food Security, Nutrition, and Rural Development (G-SAN-DR). Through the GIA and the G-SAN-DR, multilateral and bilateral organizations coordinated successfully under the first phase of Feed the Future. The G-SAN-DR is currently co-chaired by the European Union (EU) and the World Food Program. Private and civil society sectors coordinate with PESAN via the Advisory Council for Social Participation (INCOPAS).

Given that coordination mechanisms are well established, coordination through PESAN on areas related to the ENPDC are ongoing. The USG, especially USAID, Peace Corps, and USDA, have prioritized interventions in the ENPDC priority municipalities. The Inter-American Foundation (IAF) has several grantee partners working on food security initiatives in the prioritized municipalities. Additionally, technical assistance to the Secretariat of Food and Nutritional Security (SESAN), which coordinates on food security and reports on the ENPDC, as well as, relevant ministries (Agriculture and Health especially), is being supported by a number of donors and the USG.

Despite the GOG political declarations and the well detailed agenda for food security and nutrition, SESAN still needs the support from the USG and other donors to strengthen its role as the coordinating body for food security, and to effectively implement the ENPDC and the allocation of budget resources

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<sup>40</sup> Ibid.

from other GOG institutions. In addition, SESAN could improve engagement with the private sector and civil society to continue promoting the implementation of the GOG food security strategy.

## **Section B. Targeting**

### **B.1. Geographic Targets**

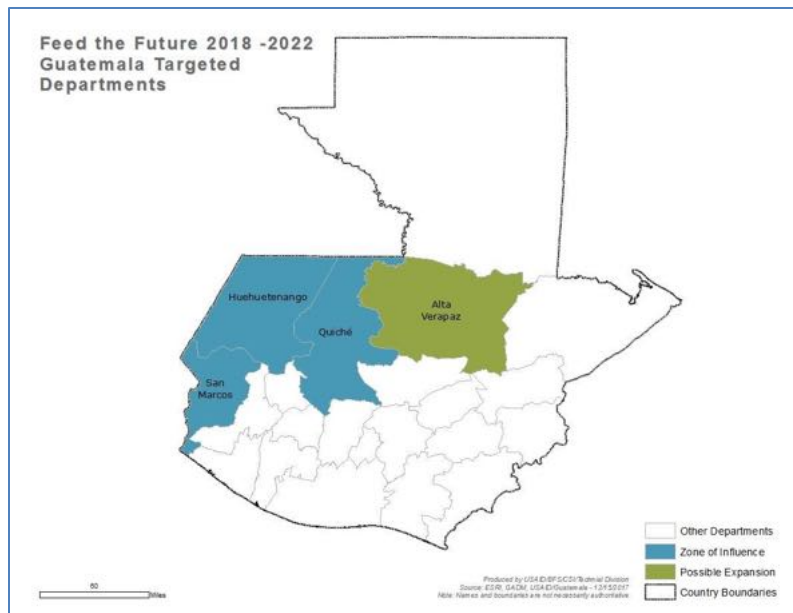
The 2018-2022 Guatemala Feed the Future ZOI will be slightly different from the ZOI in the previous phase of Feed the Future. The selection criteria for the municipalities for phase two, in addition to the previous Feed the Future Multi-Year Strategy (high prevalence of stunting and poverty rates as well as the potential for growth based on agriculture), included an analysis of relevant “economic corridors” for efficient market access, production potential, and vulnerability to food insecurity based on environmental hazards and ability to respond (based on an index developed by the Ministry of Agriculture and the Secretariat for Food Security and Nutrition). Feed the Future phase one worked in 30 municipalities, distributed over five departments. The increased impact when investments are made in contiguous areas, and the strategy of concentrating investments and interagency resources, the new ZOI will concentrate in 31 municipalities distributed over three departments: Huehuetenango, Quiché, and San Marcos (Maps 1 and 2: Map of Selected ZOI Provinces).<sup>41</sup> There are two new municipalities in the Department of Huehuetenango, three in San Marcos, and four in Quiché. This new ZOI includes approximately 8,135 square kilometers of mostly agricultural land.

These three departments of the Western Highlands have the majority of municipalities with the highest rates of stunting and poverty, and are departments prioritized by the GOG under the ENPDC. The new ZOI municipalities are classified in the 2017 Typology Study (International Food Policy Research Institute- IFPRI) as having relatively high agricultural potential but low efficiency of agricultural production, and high to very high levels of vulnerability due to climate events. This region is also where Guatemala’s indigenous population is concentrated. In addition, these municipalities encompass three regional nodes that can be used for economic development as prioritized by the GOG.<sup>42</sup>

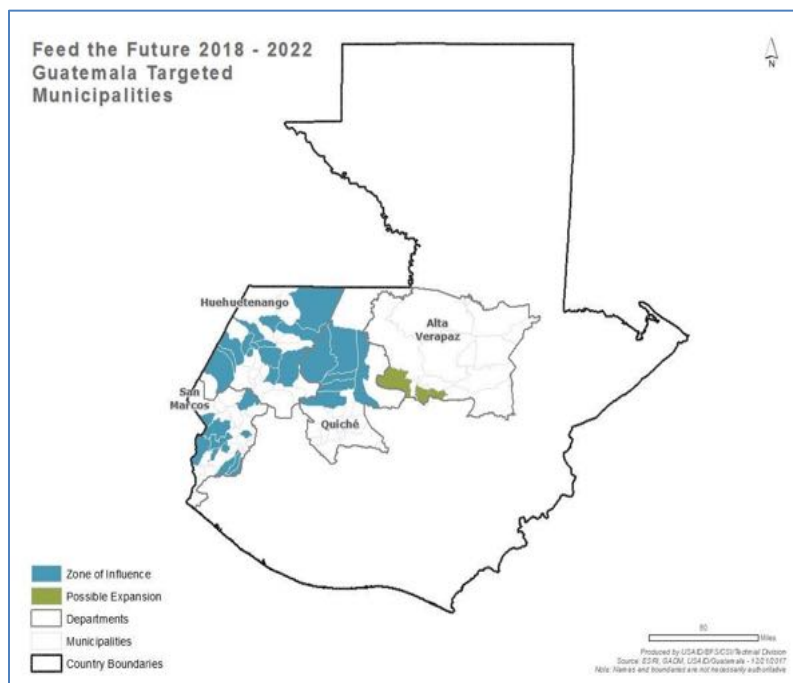
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<sup>41</sup> The four municipalities removed from the Zone of Influence will still have a number USAID and USDA programs as part of the transition from the previous Western Highlands Integrated Program. The removed municipalities are Totonicapán: Momostenango, Santa Lucia La Reforma and Quetzaltenango: San Juan Ostuncalco, Concepción Chiquirichapa.

<sup>42</sup> SEGEPLAN, 2012. “Katun 2032”.



Map 1



Map 2

Private sector companies have expressed their interest and commitment to economic growth and social development in the ZOI. They have the potential to accelerate impacts through scalable market-led approaches, improved technology, and the development of new market opportunities. As such, GFSS

could provide a catalyst to private-sector driven economic development and investment in the agriculture sector in the targeted region. Thus, these municipalities are among those that have the greatest unmet need and where investments are expected to have relatively high return in terms of reduction in poverty, hunger, and malnutrition.

Three additional municipalities in the department of Alta Verapaz may be included in the ZOI during the latter half of implementation of this food security strategy, as USAID, U.S. Department of Agriculture (USDA), US Peace Corps, and IAF develop partnership opportunities related to cacao and coffee. USAID/Guatemala will also work at the national level and outside of the ZOI and proposed value chains, as opportunities for sustainable agriculture investment that reduce poverty, increase community resilience, and improve nutrition are identified. Evidence and lessons learned from implementation under the GFSS will be shared with the GOG and other stakeholders at national and local levels to encourage the adoption of effective programming practices outside the target municipalities.

## B.2. Target Population

This Guatemala GFSS Country Plan will involve three distinct target groups. In the ZOI, with a total population of approximately 1.4 million, of which 50 percent are women, Feed the Future will be providing assistance to smallholder farmers (with an emphasis on youth and female producers), women of reproductive age, and children under five. The USG will continue to work closely with government counterparts within GOG Ministries and Agencies (i.e. Ministry of Agriculture, Ministry of Health, SESAN and others) as well as municipal offices in the selected Departments within the ZOI. The private sector, through multinational, national, and local businesses, will be involved as partners and beneficiaries to achieve results and development impact with a focus on small and medium agricultural enterprises in the ZOI.

The majority of Guatemalan farmers in the Western Highlands are smallholders. While the general aim of this GFSS Country Plan is to include all farmers in a strengthened market system, it is also recognized that, due to land resource constraints, this is not possible with all smallholder farmers. Therefore, farmer households are targeted for different technical interventions based upon resource availability (these approaches are described in Section D). These groups can roughly be characterized as farmers participating in commercial production; farmers who have resources to commercialize but are not currently selling to markets; and farmers who do not have resources to commercialize. Farmers will be targeted through formal and informal groups, including associations, consortiums, and lending groups, to support improved agricultural productivity, improved market access and, increased value addition activities.

Based on lessons learned through the previous Feed the Future strategy, the GFSS will continue strengthening the association model of small farmer producer organizations in Guatemala to improve their management, leadership, and negotiation skills. This will help cultivate active leaders within communities to support local development and strengthen their capacities to address specific issues of common interest, such as new market opportunities, generation of income, and food security and nutrition. Under the Country Plan, the USG will support GOG efforts to support a permanent surveillance system to monitor stunting, underweight, and anemia, in order to detect unintended negative

consequences of introducing income-generation activities geared towards women without necessary support for and consideration of women's time-use, energy expenditure, and childcare.<sup>43</sup>

Women play a key role in household and home garden-level production, including backyard poultry production, and will also be targeted through business skills training to encourage their engagement at higher levels within value chains. Some of the most vulnerable families in the ZOI are those whose land holdings are very small or do not own land. Therefore, they will be target beneficiaries of off-farm income generating opportunities. Youth and farmers from marginalized communities will come together through different community-based groups to learn about nutrition, engage in disaster risk management activities, and learn how to improve productivity and add value to agricultural production. Households with pregnant and lactating women, as well as, children under age five, will be targeted for nutrition-specific and nutrition-sensitive interventions, including healthy timing and spacing of pregnancy, early initiation of and exclusive breastfeeding for the first six months of life, appropriate complementary feeding of infants and young children with continued breastfeeding, and promotion of mutual support networks to help with proper child care. Based on experience from implementing Social Behavior Change (SBC) under Feed the Future, whole families will be targeted for SBC, including fathers and grandmothers.

The Guatemala GFSS Country Plan will leverage GOG infrastructure and established policies to support improvements in agriculture, health, and nutrition service delivery in communities. Where relevant, the Country Plan will support the development of new or existing policies to address barriers to food security, resilience, and nutrition. The counterparts in the relevant ministries will be linked with capacity building efforts to ensure improvements in the delivery of agricultural, health, and nutrition services in communities within the ZOI. Established civil society groups will be supported to provide social auditing of service quality and advocacy to increase accountability. This Country Plan will also leverage private sector investments to facilitate value chain development. To ensure the development and dissemination of productivity enhancing technologies, the Country Plan will coordinate with Feed the Future Innovation Labs, centrally funded research programs, international and regional research institutions, and agricultural universities and institutes.

## **Section C. Results Framework**

### **C.1. Theory of Change**

#### **Problem Statement:**

Historic social and economic exclusion of rural and indigenous populations in Guatemala has concentrated poverty, hunger, and malnutrition into the Western Highland region. Chronic underinvestment in social and economic service delivery means that the key interventions needed to break cycles of poverty and malnutrition are not reaching these populations. Moreover, norms and practices around gender roles, child care, and hygiene combined with a lack of public services result in high levels of stunting. Dwindling farm size, low productivity, limited diversity of production, particularly in

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<sup>43</sup> The USAID Health and Education Office already has years of experiences with a surveillance system of health and nutrition (SIVESNU) and SESAN is trying to adopt it as its official monitoring system.

nutrient-dense foods, and weak links to markets limit the earning potential for farmers, reduce dietary diversity, and increase chronic vulnerability of households, further constraining the enabling environment for nutrition.

Theory of Change:

In order to reduce stunting and poverty in Guatemala in a sustainable way, the USG will focus investments on addressing the multifactorial causes of both stunting and poverty. Underlying all interventions is a cross-cutting capacity building and policy approach, which focuses on targeting national and local GOG actors, civil society, and private sector firms to better implement their own activities to reduce poverty and malnutrition. Recognizing that increased incomes are necessary, although not sufficient, for household access to a diverse, nutritious diet, activities will focus on increasing rural incomes by improving productivity of key value-chains and crops, expanding value-added agricultural production, and diversifying crop and livestock systems to access higher-value markets. At the same time, the USG will promote techniques at the farmer and system level that reduce vulnerability to climate variability, crop pests and diseases, and market shocks. In order to address nutrition outcomes, a comprehensive approach, particularly incorporating the agriculture to nutrition pathways, will be used to target households, health service providers, and other key actors to ensure that SBC, nutrition-sensitive interventions, and nutrition-specific interventions are sustainably implemented to improve the nutritional status within the ZOI, where feasible. Targeting households includes a holistic approach to all family members, keeping particular focus on women's empowerment and children under five, and building on the SBC communication piloting efforts from phase one of Feed the Future that have identified opportunities for incorporating men and mothers-in-law as change agents.

Experiences from the first phase of Feed the Future demonstrate that the value-chain approach to diversify rural income sources while partnering with the private sector can move significant numbers of people out of poverty in the Western Highlands. The value chains of horticulture and coffee hold the strongest potential for smallholder farmers from the Guatemala Western Highlands to engage in the market, not ruling out the potential for others, such as livestock and beans. From 2013-2017 in the first phase of Feed the Future in Guatemala, 74,000 full-time equivalent jobs were created and sales of coffee and horticulture exports increased by \$177 million. Coupling increased incomes, which increase households' resilience to shocks, with normative and behavior change-centered approaches and interventions to improve access to and use of effective health services, appropriate child care, safe water, the consumption of safe, diverse diets, while improving hygienic environments, increasing the adoption of hygiene and sanitation behaviors, and women's empowerment will result in reduced stunting for children.<sup>44</sup> Cutting across all of these interventions are approaches that build institutional capacity from central government down to local levels to provide systemic improvements to policy implementation including sanitary and phytosanitary services, agriculture extension, health services, and water and sanitation services, climate risk management, and institutional shifts that allow indigenous men, women, and youth greater participation in the government and economy.

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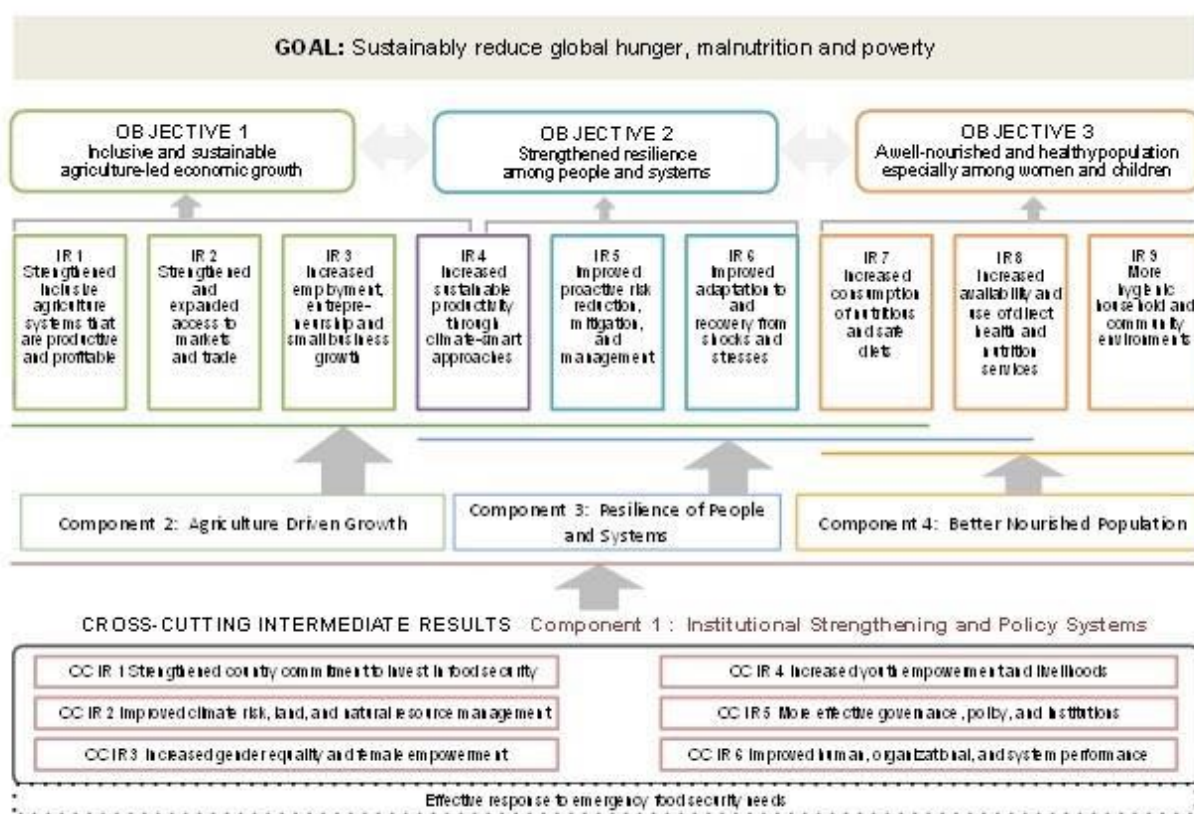
<sup>44</sup> Johns Hopkins University, 2017. "Health Communication Capacity Collaborative: HC3 Guatemala Final Report 2014-2017." This report highlights that families with normal height children have a number of common characteristics, including higher income, a minimally acceptable diet, and nutrition-specific and sensitive behaviors.



An important change in this new phase of Feed the Future is the integration of homestead animal source food production and a comprehensive social behavior change approach into the income-focused value-chain approach to improve nutrition-sensitive outcomes, including the consumption of high-quality protein in the diet. Additionally, there will be a stronger emphasis on strengthening the vertical chain of service delivery and municipal and community level governance. These shifts implicitly acknowledge that while long-term, aggressive, national-level government support is required to eliminate poverty and stunting in Guatemala, reductions can be reached in key indicators with more medium-term and strategic interventions that are the responsibility of local communities and local authorities. The USG, working with SESAN, has targeted the most strategic of the interventions, to demonstrate progress that will help galvanize political will to foster more investment to address the underlying causes of poverty and stunting.

The objectives and intermediate results are adapted from the Global Food Security Strategy Results Framework with minor edits. A major impediment of the Guatemalan health system is the availability of basic health and nutrition services. Therefore, Intermediate Result (IR) 8 has been reworded to reflect the strengthening of the country's capacity to improve the availability of services in rural areas.

## U.S. Government Guatemala Food Security Strategy Results Framework



## **C.2. Food Security Country Plan’s Contribution to Guatemala’s Strategic Transition**

The proposed Feed the Future investment in Guatemala will have a sustainable impact on the reduction of poverty and malnutrition by demonstrating that when on-the-ground behavior changing interventions are coupled with improved service delivery and livelihoods, then measurable change is achievable. Each of the Program Components outlined in the next section combine to demonstrate how to address the underlying causes of poverty, hunger, and malnutrition. Building the capacity of all actors across the agriculture, nutrition, and health sectors to provide accurate and relevant information and services will help to transition Guatemala off of GFSS assistance. The USG and other multilateral and bilateral donors, through the co-implementation of projects, will give the GOG the skills and experience to effectively implement established policies and effectively deliver the necessary agriculture, health, and nutrition services to target populations, as well as, to plan and budget for needed programs in the future.

The interventions outlined in this Country Plan will also strengthen the capacity of civil society to monitor and report on the quality and effectiveness of service delivery and advocate for more effective and accountable policies. The USG’s policy work to streamline trade regulations and decrease market inefficiencies will reduce food cost, while capacity building of the agriculture sector carried out with the private sector to meet export standards will improve profitability and expand market access both regionally and internationally.

Guatemala’s National Development Plan (K’atun 2032) and the National Strategy to Prevent Chronic Malnutrition 2016-2020 outline the national priorities of reducing stunting by 10% in the short term and 24% by 2032. These plans call for improved food security and human development through a synergistic matrix of improvements in agricultural production and productivity, adaptation to climate change, access to potable water and sanitation, and changes to attitudes and behavior regarding hygiene and appropriate child care. The approach used by these plans is closely aligned with the Guatemala GFSS Country Plan theory of change. The optimal timeline to see changes in malnutrition is five to 15 years. However, this transition in Guatemala depends upon closing the budget gaps, providing an enabling environment for investments, and ensuring the longevity and success of the proposed Feed the Future Country Plan interventions.

### **Section D: Program Components**

The core of the USG approach builds on the successes and lessons learned from implementation of the first phase of Feed the Future, during which USAID worked with the private sector and the local authorities. The value chain approach increased household incomes and moved people out poverty.<sup>45</sup> Also, the results from the first phase of Feed the Future in Guatemala made clear that without a strong primary health care system, improved water, sanitation and hygiene (WASH), careful and constant attention to child care, increases in dietary diversity, and a comprehensive behavior change approach, there will likely be no decrease in the stunting rates. Therefore, this new phase of Feed the Future will continue to target and expand on these, prioritize in SBC and local ownership, and support climate resilience. There will be increased emphasis on improving off-farm employment, on the ground

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<sup>45</sup> USAID, 2017, “Evaluación final del Proyecto Cadenas de Valor Rurales.”

implementation of existing policies (rather than creating new policies), and support for other nutrition sensitive approaches that will increase dietary diversity, food safety, and WASH. Finally, the USG will also work to facilitate women's leadership in cooperatives and other enterprises, participation in household decision-making, access and control over household resources and income, and access to social support networks.

Many of the larger systemic and structural changes are being undertaken using resources outside of those included in the GFSS. These contributions are highlighted where appropriate. A coordinated, comprehensive approach to SBC will be particularly important. Targeted messaging will also aim to promote shared responsibilities and decision-making among couples in the household. Finally, violence, including gender-based violence along with early pregnancy and early marriage, are factors that inhibit the target population, and women's and girls' contributions in particular, to inclusive agriculture-led growth and nutrition; therefore, USAID programming (mostly supported through non- Feed the Future funding sources) will aim to address these issues, as relevant.

#### Selected Value-Chains

Based on the stocktaking analysis, stakeholder consultation and workshop consensus, and experience from previous Feed the Future results, this Guatemala GFSS Country Plan will focus on horticulture and coffee value chains under an integrated farming systems approach. These priority value chains were selected based on their demand in the global market, commercial viability, and size of the target population involved in the chains.

Further, maize, beans, and small animal protein sources (e.g., poultry, goats and rabbits) will be included as part of an approach to increase dietary diversity. Small scale, household-level integrated production systems will be promoted, particularly where locally available agro-byproducts and vegetation can be incorporated into animal production systems with minimal land requirements. Interventions will focus on upgrading local production through animal health and husbandry improvements to meet household needs and generate locally marketed surpluses, scaling-up successes from Feed the Future pilots. Food safety will also be emphasized.

New value chains will be considered, both for income generation and production of nutrient rich foods, particularly if there is an opportunity to leverage investments by private sector firms.

Maize is a staple of the Guatemalan diet, but widespread mycotoxin contamination in maize is a public health concern. While previous inquiry has determined that the levels of mycotoxins in maize are concerning, the proximate step of illustrating the scale of exposure to humans is required. Interventions will focus on the improved technologies in production, harvesting, storage and quality control as well as the promotion of dietary diversity for impact in the short and medium term, and research to determine the extent of the health problem for long-term advocacy and response.

### **D.1. Component 1: Advancing Country Leadership Through Institutional Strengthening and Policy Systems**

## Component 1.1. Institutional Strengthening

The key cross-cutting challenge underlying much of the USG and donor programming in Guatemala is the need to strengthen the vertical chain of service delivery down from the central government, through municipal governments, and to the communities. This is true of agricultural and primary health services, as well as, for education, security, and infrastructure. The institutional strengthening component targets technical staff at the central government, municipal, and community level to build the capacity to better manage and improve the quality of agricultural, nutrition, and health services at the national and municipal level in relevant ministries and municipal offices.

### **Illustrative activities:**

- Strengthen capacity to better hire and manage human resources.
- Enhance capacity to develop and execute budgets, manage finances, procure goods and services transparently, and monitor spending and procurement.
- Build capacity to better manage, learn, and adapt implementation of organizational coordination strategies.
- Strengthen capacity of the central government (Ministry of Health) to improve its coverage of primary health care services.
- Build capacity of central and local government to devise and implement risk (nutrition, climate, and agricultural pest) reduction strategies.
- Strengthen capacity to address the specific needs of rural women and better integrate gender in government policies, programs and services.
- Improve capacity of the municipal water offices to develop and support water systems.
- Support efforts to streamline customs regulations and procedures.
- Support efforts to improve water management, monitor the quality of water and invest more in water and sanitation at the municipal level.

## Component 1.2. Policy Systems

Many of the challenges facing the Ministry of Agriculture (MAGA), SESAN, and other public institutions responsible for addressing food insecurity relate to the limited capacity of the GOG:

- A poorly functioning civil service and extension system that underemphasizes the importance of technical merit.
- An outdated and burdensome public procurement law (Ley de Contrataciones del Estado) that stifles competition among providers.
- An inefficient budget law (Ley de Presupuesto) that does not encourage longer-term investments in development since there is little oversight over line ministries' resource allocations.
- The lowest domestic resource mobilization (in terms of tax-to-GDP-ratio) in Latin America.

These limitations have profound implications for the transformational changes Feed the Future hopes to promote in the ZOI and beyond. While other USG activities will continue addressing some of these institutional issues in their programming, Feed the Future will continue working with different levels of government to improve their management of public budget and services. At the municipal level, the USG will support improved watershed management for agriculture productivity and human consumption along

with distribution of clean water; at the national level, the USG will support improvements in capacity for compliance with the U.S. Food Safety Modernization Act (FSMA), more effective agricultural extension, and alignment with regional customs.

In light of the importance of policy decisions in shaping the opportunities for improved food security across Guatemala, the USG has prioritized the following policy actions:

1. Support the Ministry of Agriculture's capacity to help producers and exporters meet the requirements of the U.S. FSMA.
2. Improve funding for and the capacities of public agricultural extension.
3. Strengthen local governance for water resources management.
4. Advance the Central American Customs Union and science-based regulations.
5. Strengthen the capacity of municipal governments to create local policies and an enabling environment to stimulate private sector investment.

## **D.2. Component 2: Agriculture Driven Growth**

Efficient value chains are the structure upon which productive and profitable agricultural systems are built. Improvements in agricultural productivity often require investments in transformative technology and leveraging private sector funds to stimulate innovation and production of these technologies. Improving the availability of information to actors along the value chain and improving infrastructure to support aggregation and transportation, in addition to other measures to reduce transaction costs, all strengthen value chains (IR 1, 2, 3). Building the capacity of all value chain stakeholders to sustainably intensify agricultural production increases profitability of farms and rural incomes.

Rural communities in Guatemala also have many smallholder farmers who do not have sufficient resources -- land, financial and/or human capital -- to produce beyond subsistence levels or shift from growing staple crops and enter the market. Therefore, reducing barriers to off-farm employment, and supporting the diversification of on-farm income generation strategies and rural non-agriculture based value chains will help increase rural incomes. Activities that are more likely to be managed by women, such as post-harvest activities in coffee and horticulture value chains, small-scale livestock production and handicrafts, have great potential to give rural women better access to markets and generate more income under their control (Cross Cutting (CC) IR 3). Increased rural incomes from a diversified stream of income generating activities may also increase access to nutritious food and improve the resilience of communities (IR, 5, 6, 7), provided that livelihood strategies are stable, offer a relatively high return, and are not vulnerable to the same risks. Livelihood diversification is only one means of managing the range of risks poor and near-poor households' face, particularly those associated with agriculture-based livelihoods. Further, research has shown the potential for mobile money in some contexts to improve resilience to shocks by providing a quick way to access remittances and stored savings, and they can lead to the development of other digitally-enabled financial services such as credit and insurance.<sup>46</sup> Investments in agricultural productivity along with partnerships with private sector businesses and organizations have the potential to increase incomes throughout the rural community. The Guatemala

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<sup>46</sup> Suri, T. and Jack, W. (2016). The long-run poverty and gender impacts of mobile money. Science 354 p1288-1292. <http://science.sciencemag.org/content/354/6317/1288>

GFSS Country Plan will link these productive communities with markets through efficient infrastructure systems and/or economic corridors (IR 2).

The agriculture development interventions of this country plan will sustainably increase the incomes of smallholder farmers through horticulture and coffee value-chain development, as well as improving access to a diverse diet. Agriculture activities will incorporate nutrition-sensitive approaches and include nutrition objectives and indicators, as evidence shows that purposeful planning towards nutrition goals is critical for success. Additionally, this GFSS Country Plan will strengthen and bolster linkages to support producers and expand sales in new and established markets thus creating sustainable value chain activities.

### **Illustrative activities:**

- Build the technical and organizational capacity of smallholder farmers through the provision of relevant information and services so that they can sustainably increase agricultural production.
- Strengthen the research and development technical capacity and integration of research institutions, faculties of agriculture and technical institutes in the fields of sustainable and climate smart agriculture, human nutrition, and extension, and ensure that improved technologies and innovations are made available to producers.
- Strengthen the links between all the agricultural development stakeholders to better develop and scale strategies to sustainably intensify and diversify farming and post-harvest systems;
- Support the improvement of access to credit among beneficiaries in the ZOI.
- Create economic opportunities for youth in the agriculture sector.
- Provide technical assistance to allow non-commercial farmers to begin to participate in horticulture, coffee, small livestock and poultry value chains (for example, using a “push-pull approach”<sup>47</sup> and value-chain deepening<sup>48</sup>).
- Link households with limited land resources with value-added agriculture and off-farm opportunities (for example: service provision, seed multiplication, or value-added processing).
- Support the improvement of infrastructure, particularly roads and storage facilities through community and farmer groups.

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<sup>47</sup> The push-pull approach “aims to bring more structure to poverty reduction work at both ends of the economic spectrum through a more interactive, coordinated, market-led process of gradual change at both the household and systems levels. It is one of many approaches that can support pathways out of poverty for the extreme poor.” It focuses on a multi-stage process that helps households stabilize consumption, build an asset base, and eventually smooth consumption so that they can start to increase assets and participate in value-chain activities. This description is taken from <https://microlinks.org/good-practice-center/value-chain-wiki/overview-very-poor-populations>.

<sup>48</sup> “In deepening the value chain, firms address gaps including unmet market demand and value, opportunities for vertical or horizontal integration, greater specialization, and the expansion of services to other value chain members.” This deepening can be focused on creating opportunities for new actors to enter into the value-chain, in the case of Guatemala this could be used for youth, women, and households that have smaller/fewer assets. The definition is taken from, *Building Competitiveness in Africa’s Agriculture: A GUIDE TO VALUE CHAIN CONCEPTS AND APPLICATIONS*. Accessed: <https://openknowledge.worldbank.org/bitstream/handle/10986/2401/524610pub0afr0101official0use0only1.pdf?sequence=1>

- Build the capacity of relevant GOG entities to improve agriculture strategic planning, appropriate budgeting and financial management.
- Improve the capacity of farmers to adhere to Good Agricultural Practices, Sanitary and Phytosanitary (SPS) regulations, and other standards for entry into higher value markets (such as Fair Trade and organic).
- Foster partnerships with stakeholders to implement irrigation systems.

#### D.2.1. Component 2: Agriculture Driven Growth: Washington and Regional Investments

##### Agriculture Research and Development for Innovation:

To ensure proper incorporation of new and innovative approaches into the learning, design, and implementation of food security and nutrition programming, the Guatemala GFSS Country Plan, with guidance from the Global Food Security Research Strategy, will leverage new and improved agricultural technologies, practices and expertise from USAID/Washington staff, USDA, Feed the Future Innovation Labs, the Consultative Group for International Agricultural Research (CGIAR), the National Agricultural Research System (NARS), relevant stakeholders, and other centrally-funded research programs. Close collaboration between Mission staff responsible for value chain programming and in-country Washington-funded research investments will be highly encouraged and incentivized so as to ensure uptake of research-derived technology innovations.

#### D.3. Component 3: Resilience of People and Systems

Strengthening the capacity of value-chain stakeholders and systems -- including government institutions - - to adopt climate-smart agricultural practices, including water resource management, will help maintain long-term soil productivity and reduce climate-related vulnerabilities (IR 4). Household diversification of agricultural activities, particularly the introduction of small livestock and poultry production, increases the availability and consumption of nutritious food, including high-quality protein, reduces the incidence of malnutrition, and improves resilience (IR,5, 6,7).

In the short-term, the capacity to recognize early warnings and respond appropriately, as well as, increasing risk mitigating strategies like agro-insurance will reduce food insecurity of the community and potentially mitigate the negative impact on agricultural assets of individual farmers and the communities they live in (IR 6). Remote sensing technology combined by other information and communication technology (ICT) tools can play a role in the collection and sharing of data and information between farmers and the institutions that support them -- including for weather information, pest outbreaks, and index insurance. Further, a projected increase in drought conditions will likely have serious implications for water resource availability. Addressing this climate shock requires an integrated approach that incorporates land and water management practices such as watershed management, water harvesting and its efficient utilization through smart irrigation practices, and other methods that enhance resilience. In the long-run, diversifying both livelihood risks and agricultural activities, as well as, increasing the use of sustainable and climate-adapted agricultural practices, also reduces the risk associated with both climate and economic shocks and helps mitigate the negative impact (IR 5).

##### Illustrative Activities:

- Support the provision of social auditing to monitor the delivery and quality of services by public and private institutions and provide information for early warning systems (including weather/climate systems, warning systems for pests, etc.) that generate and communicate risk and potential response information.
- Conduct feasibility assessments to explore options for expanding the availability of hazard/index insurance and promoting other risk management strategies.
- Provide technical assistance to increase access to credit from financial institutions and through community group-based savings and lending; leveraging digitally enabled channels where appropriate.
- Support programs that increase off-farm employment opportunities (either formal or non-formal) and income generation through job readiness programs, farming as a business programs and/or financial platforms to enhance innovation and entrepreneurship.
- Build the capacity to improve postharvest processing, food and feed preservation, and storage methods.
- Improve watershed management and water delivery systems at the municipal level.

#### D.4. Component 4: A Better Nourished Population

USAID Guatemala will support a combination of well-monitored, high-quality nutrition-sensitive and specific interventions to contribute to improved nutrition and, over time, reduced rates of stunting among the target population. For sustainable gains in nutrition, the Guatemala GFSS Country Plan will incorporate a strong collaborating, learning and adapting (CLA) approach with a rigorous learning agenda to guide the use of strategic data and allow for adaptive management. Monitoring data, tailored assessments, and activity evaluations will be used to identify the combination of interventions that address key drivers of stunting specific to Guatemala, and accelerate impact. Activities will measure intermediary nutrition outcomes to determine more time-sensitive impacts or unintended consequences. If new drivers of stunting are identified through the learning agenda, they will be addressed in programming.

Agriculture plays a key role in improving nutritional status of women and children. While increased production and productivity can improve the availability of food for consumption, increase incomes, and decrease the prices consumers pay, these alone do not automatically translate to nutritional gains. Nutrition-sensitive agriculture can increase the availability and consumption of diverse and nutritious foods for rural households, especially women and children, by increasing the affordability of food available in local markets, generating income for expenditure on food and non-food items, and increasing women's empowerment, which affects income, caring capacity and practices, and female energy expenditure. Building on learning and evidence from past investments, emphasis will be placed on improving dietary diversity with nutrient rich foods, with a focus on high-quality sources of protein, namely animal sourced foods. Gender equality and women's empowerment will be central to improving nutrition outcomes. Pathways and principles linking agriculture to nutrition will be used to systematically consider opportunities and threats to nutrition across all GFSS program components.

To address nutritional gaps and reduce stunting, efforts will be focused on pregnant and lactating women and children in the first 1,000 days. Activities will improve women's control over resources and decision making, while promoting social and behavior change to improve nutrition for themselves and their



children. Other immediate and underlying causes of malnutrition related to health and care, such as access to clean water and sanitation, inadequate care and feeding practices, or lack of quality health services will also be addressed by providing technical assistance at the municipal and community level of maternal and child health services. Recognizing the need for a fully multi-sectoral approach and the potential for partnerships to increase impact and sustainably achieve scale, USAID will explore opportunities for collaboration with other donors, the private sector, and civil society. Successfully leveraging these partnerships will also be important since with USG resources alone, the scale of implementation of many of the above-mentioned interventions will likely be limited to a smaller area of the ZOI. Food assistance programs, including school feeding programs, will also be used. The increased agricultural production from Component Two, coupled with improved food safety (especially for reduced mycotoxin contamination of maize), and SBC will result in increased consumption of a diverse diet (IR 7). Additionally, it is important to understand, plan for, and mitigate the impacts of shocks and stresses, especially droughts, floods and invasive pests and animal and plant diseases, on the nutritional status – both acute and chronic - of women and children.

Particularly important will be the coordinated, comprehensive approach to SBC. All USG agencies have agreed to use one SBC approach that integrates and incorporates consistent messaging (IR 7, 8, 9). These messages will address norms and practices that result in high levels of stunting and emphasize the importance of eating a diverse diet, accessing health services, improving infant and young child care and feeding practices, and accessing family planning to address unmet needs and to increase healthy timing and spacing of pregnancy. Additionally, the GFSS will leverage other USG and donor funding being used to improve water and sanitation systems.

#### **Illustrative activities:**

- Deliver coordinated SBC across projects to improve nutrition, dietary diversity, and health behaviors.
- Provide technical assistance to GOG to improve food safety, particularly of maize.
- Partner with private sector to reduce mycotoxin levels of maize in regional markets.
- Support social auditing of health and nutrition service provisions in the ZOI communities, or a smaller subset of communities depending on resources.
- Strengthen the capacity of the Ministry of Health to improve the quality of maternal and child health and nutrition services focusing on the first 1000 days of life window.
- Provide technical assistance to improve the planning of water and sanitation services.
- Build the capacity of the Ministry of Health, SESAN, and municipalities to monitor the demand and delivery of direct nutrition interventions.
- Improve the capacity of relevant GOG entities to improve health strategic planning, appropriate budgeting and financial management.
- Build the capacity of the Ministry of Health to develop Quality of Care policies.
- Implement nutrition sensitive interventions that include, in an area that may be smaller than the ZOI depending on resources: family planning, WASH, early child care and development, girls' and women's education, and economic strengthening.
- Implement nutrition-specific interventions that include: identification and referral of severe/moderate acute malnutrition, protection of breastfeeding, appropriate complementary feeding, adequate nutrition of women during pregnancy and lactation. Promote and integrate

maternal and infant and young child nutrition interventions as part of a nurturing care framework for improved early childhood development.

## **Section E. Stakeholder Engagement Platforms**

As described in Section A.3., there are already existing mechanisms in Guatemala to coordinate between international donors and the GOG through SESAN. The USG will continue to participate in these coordination and integration meetings on a regular basis. Also at the national level, USG agencies maintain close working relationships with the Ministry of Health and Social Services as well as the Ministry of Agriculture, Livestock and Food, Ministry of Economy, and Ministry of Government through meetings at various levels, as well as, more informal platforms. The USG and USG implementing partners hold regular meetings, and reports are reviewed and activities monitored through the in-country headquarters staff. The USG will also closely consult and partner with private sector organizations such as Foundation for the Development of Guatemala (FUNDESA), Coordinating Committee of Agricultural, Commercial, Industrial and Financial Associations (CACIF) and others that deal with social and economic development as well as food security in Guatemala.

The GFSS country plan for Guatemala emphasizes more development and capacity building at the municipal and community level. This is currently done and will continue to be done through USG implementing partners who will coordinate their efforts at the municipal and community levels. A primary partner will be designated to lead coordination efforts in specific technical areas and with the relevant GOG entity. The USG will continue its engagement with the community leaders and municipal government representatives, as well as, direct engagement of the target population.

In addition, USAID will strengthen key civil society organizations to advocate for public policies to address food security and water and sanitation behavior change issues for communities in the Western Highlands.

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## U.S. Government Interagency Partners

