GUATEMALA
Anticipated impact of drought

acaps
Briefing note
13 March 2024

CRISIS IMPACT OVERVIEW

In 2023, El Niño contributed to low and erratic rainfall, short periods of extreme rainfall events, and consistently high temperatures in many parts of Guatemala (FEWS NET 02/03/2024; ACAPS 25/07/2023). As at December 2023, El Niño-related drought had already affected 15 of Guatemala's 22 provinces. Drought and high temperatures are projected to continue through May 2024 (OCHA 20/12/2023; FEWS NET 02/03/2024). Effects may be particularly severe in Guatemala's Dry Corridor, including all or parts of Baja Verapaz, Chimaltenango, Chiquimula, El Progreso, Guatemala, Huehuetenango, Jalapa, Jutiapa, Quiché, Totonicapán, and Zacapa departments (ILO 2020; OCHA 20/12/2023).

Low rainfall and high temperatures are anticipated to aggravate the continuing drought, further increasing livelihood, food security, nutrition, WASH, health, and education-related needs in affected communities (OCHA 20/12/2023). Most affected communities in the Dry Corridor are small-scale or subsistence farmers and day labourers, whose coping capacities were already diminished at the start of El Niño in 2023 as a result of years of erratic rainfall in this part of Guatemala (HRW 15/11/2023; OCHA 20/12/2023). Food insecurity and associated malnutrition are a particular concern given Guatemala's high rates of chronic and acute child malnutrition (50% of children under five experience chronic malnutrition), which are among the worst rates globally (OCHA 20/12/2023; WFP 29/01/2024). It was estimated that approximately 3.1 million Guatemalans (18% of the population) experienced Crisis (IPC Phase 3) or higher levels of food insecurity in February 2024 (IPC accessed 13/03/2024). Another significant drought-related concern relates to communities' reliance on contaminated water, which may increase the spread of water and sanitation-related illnesses, aggravating malnutrition and potentially contributing to Guatemala's current dengue fever outbreak (OCHA 20/12/2023; PAHO 16/02/2024).

As a result of systemic inequality, indigenous people – who comprise an estimated 44% of Guatemala's population – are at particularly high risk of severe humanitarian needs, as they have limited access to economic opportunity, healthcare, and other basic services (IWGIA 17/04/2023). Children are at risk of even higher malnutrition rates, associated health problems, and disruptions to education (OCHA 20/12/2023). Migrants and refugees, who increasingly transit through Guatemala on their way to, primarily, North America, may also be at increased risk of drought and heat-related needs because of their limited access to shelter, WASH, and health infrastructure (IOM 10/10/2023).

Anticipated developments

The dry season in Guatemala typically runs from November–April (WB accessed 07/03/2024). Guatemala's National Institute for Seismology, Vulcanology, Meteorology, and Hydrology (INSUVIMEH) estimated a 10–20% chance of below-average rainfall across most of Guatemala in March 2024, with the lowest precipitation levels expected in the central highlands, eastern, Pacific coast, and western regions (INSUVIMEH 29/02/2024). Over the longer term, the World Meteorological Organisation and European Centre for Medium-Range Forecasts predict a 40–50% chance of above-average rainfall in southern Guatemala between March–May 2024 (WMO accessed 07/03/2024; ECMWF accessed 07/03/2024). This forecast, however, reflects cumulative precipitation predictions and does not preclude long periods of below-average rainfall interspersed with high rainfall over a short period.

Both the World Meteorological Organisation and European Centre for Medium-Range Forecasts predict a 70% chance of above-average temperatures across Guatemala through May 2024 (WMO accessed 07/03/2024; ECMWF accessed 07/03/2024). In March and April 2024, particularly high temperatures of up to 43° C are expected in Petén department (northern Guatemala) and eastern Guatemala (especially Zacapa department). Temperatures of up to 37° C are expected along the south coast and in the central highlands region, including in the capital, Guatemala city (INSUVIMEH 29/02/2024; Prensa Libre 26/02/2024).

Fire season in Guatemala typically runs from February–April (NASA 25/02/2024). As at 2 March 2024, there were 16 active fires across eight of Guatemala's departments, including in Guatemala, Huehuetenango, Quetzaltenango, Sacatepéquez, Sololá, Suchitepéquez, Totonicapán, and Zacapa (Government of Guatemala 02/03/2024). As a result of higher temperatures and generally

KEY PRIORITIES

3.1 million
GUATEMALANS EXPERIENCING CRISIS (IPC PHASE 3) AND ABOVE LEVELS OF FOOD INSECURITY

50%
OF GUATEMALAN CHILDREN EXPERIENCING CHRONIC MALNUTRITION

5.1/10 (high)
INFORM CLIMATE CHANGE RISK SCORE

lower rainfall, more fires are expected throughout the dry season (Prensa Libre 26/02/2024 and 26/12/2023; NASA 25/02/2024). Fires affecting farmland will aggravate the impacts of drought and low temperatures on agriculture, worsening access to livelihoods and food insecurity.

CRISIS IMPACTS (CURRENT AND ANTICIPATED)

Livelihoods and food security

The low and erratic rainfall resulting from El Niño is likely to delay and decrease the 2024 primera (April–May) planting season, the principal season for maize, which is the primary source of calories and protein for most Guatemalans (FEWS NET 02/03/2024 and 29/02/2024). Guatemala's Ministry of Agriculture, Livestock, and Food projected that, in total, El Niño will cause 50% crop loss, affecting an estimated 642,000 hectares of maize and bean crops alone in Baja Verapaz, Chiquimula, Escuintla, Jalapa, Jutiapa, Quiché, Retalhuleu, and Zacapa departments (OCHA 20/12/2023).

Crop loss and delayed planting will increase production costs and cause seed loss, threatening farmers' livelihoods (FEWS NET 02/03/2024 and 29/02/2024). Famers' coping capacities were already low because of the impacts of El Niño in 2023 (OCHA 20/12/2023). Atypical rainfall delayed the 2023 primera (April–May), postrera (September–October), and postrera final (November–December) planting seasons, resulting in drought-related agricultural damage in the Alta Verapaz department, southern provinces, and some of the Dry Corridor and excess rain damage in Alta Verapaz, Huehuetenango, Quiché, and Petén departments. As at the beginning of February 2024, as a result of this long deterioration, subsistence farmers had less than one month of basic grain reserves available to cope with coming shortages (FEWS NET 02/03/2024).

Delayed and decreased planting in the primera season will also contribute to higher basic grain prices throughout 2024, aggravating food insecurity (FEWS NET 02/03/2024 and 29/02/2024). In February 2024, it was already estimated that around 3.1 million Guatemalans, 18% of the population, experienced IPC 3 or higher levels of food insecurity (IPC accessed 13/03/2024). The situation was particularly severe in Alta Verapaz, Chiquimula, Huehuetenango, Sacatepéquez, and Sololá departments, where 30–45% of the population had food assistance needs of IPC 3 or higher as at December 2023 (OCHA 20/12/2023). These figures are likely to increase in coming months as a result of continued low rainfall and high temperatures. Food prices are also likely to remain higher than the five-year average, including the price of maize and black beans, two of the main protein sources of the Guatemalan diet (FEWS NET 02/03/2024 and 29/02/2024).

The impact of this deterioration on access to livelihoods and food will be highest among small-scale farmers, subsistence farmers, and day labourers, who comprise the majority of Guatemalans living in the Dry Corridor (HRW 15/11/2023; OCHA 20/12/2023).

Nutrition

Increased food insecurity resulting from El Niño-related drought and heat is likely to aggravate Guatemala's already severe malnutrition situation. As at December 2023, around 50% of children under five had experienced chronic malnutrition, making Guatemala the sixth worst country in terms of global chronic malnutrition rates (OCHA 20/12/2023; WFP 29/01/2024). 2023 saw a 30% rise in cases of acute malnutrition in children under five, affecting over 25,000 children and causing over 50 confirmed deaths (WFP 29/01/2024). As at the end of 2023, the departments most affected by acute malnutrition were Alta Verapaz, Chiquimula, Escuintla, Guatemala, Izabal, Retalhuleu, Sacatepéquez, Santa Rosa, Suchitepéquez, and Zacapa (OCHA 19/02/2024).

Indigenous Guatemalan children are at particular risk of malnutrition, with chronic malnutrition affecting 58% of indigenous children, as compared to 38% of non-indigenous children (IWGIA 17/04/2023).

WASH and health

Heat and drought have reduced potable water sources, forcing households in affected communities to rely on contaminated water. This increases the likelihood of water and sanitation-related disease transmission, which in turn may increase deaths from malnutrition among Guatemalan children (OCHA 20/12/2023). Guatemala has also been experiencing a dengue fever outbreak since August 2023, with increased cases reported in the first weeks of 2024 (PAHO 16/02/2024). Baja Verapaz, Chiquimula, Jalapa, Quiché, Petén, Sacatepéquez, and Zacapa departments, most of which are affected by El Niño-related drought, have been particularly affected by the dengue outbreak (IFRC 28/12/2023). Low rainfall is causing a growing reliance on contaminated and unsafe water sources, potentially driving dengue transmission in coming months (OCHA 28/11/2023).

Drought and extreme heat may also increase heat stress among adults and children. Children are particularly at risk of heat stress, which can cause heat stroke, diarrhoea, and mental health and psychosocial problems (UNICEF accessed 07/03/2024). Drought-related rises in stress and anxiety among Guatemalan children have already been observed (OCHA 20/12/2023).

Education

Prolonged drought will limit Guatemalan schools' access to water and potentially damage infrastructure, putting students at risk of negative health effects and decreasing their learning capacity. Malnutrition resulting from prolonged food insecurity can also affect children's school performance and lead to increased school drop-outs (OCHA 20/12/2023). Similarly, heat waves may discourage children from attending school (UNICEF accessed 07/03/2024).

COMPOUNDING/AGGRAVATING FACTORS

Climate and natural hazards

Guatemala's INFORM Climate Change Risk score is 5.1/10 (high), with a score of 6.4/10 for drought and 5.4/10 for lack of coping capacity, indicating an inability to mitigate the impacts of natural hazards (EC accessed 07/03/2024). An estimated 75% of the country's population live in areas with high exposure to natural hazards (OCHA 20/12/2023).

Prior to the current dry season, heavy rainfall, storms, and strong winds beginning in the May 2023 rainy season affected 4.6 million people across most of Guatemala's departments (ECHO 17/11/2023). This has likely decreased the coping capacities of communities now (as at March 2024) affected by low rainfall and drought.

While the 2023–2024 El Niño Southern Oscillation has aggravated Guatemala's current drought and high temperatures, the Dry Corridor in particular has seen more erratic and intense weather patterns for several years, characterised by a later rainy season and more extreme drought and floods (WFP 08/11/2022; OCHA 20/12/2023).

Poverty and economic situation

Guatemala has experienced relatively steady growth since 2010 and is considered a country of middle-income status. High levels of economic inequality persist, however, with two-thirds of the population living on less than USD 2 per day. An estimated 52–60% of the population lives in poverty, with higher rates (79%) among indigenous people (WFP 31/03/2023 and 05/03/2024; WB accessed 07/03/2024).

While inflation has shown signs of decreasing since January 2024, the price of food, fuel, and other basic goods remains high. Agricultural supply prices are also high, increasing production costs and aggravating already high food prices (FEWS NET 02/03/2024 and 29/02/2024; Focus Economics 23/02/2024).

Political and security situation

In August 2023, Bernard Arévalo was elected President of Guatemala on an anti-corruption and socioeconomic investment platform. Arévalo was sworn in on 15 January 2024, despite months of judicial attempts to declare his victory invalid. Arévalo and his relatively small party, Semilla, face a divided Congress and significant political opposition (ICG 30/01/2024; WB accessed 07/03/2024). These dynamics may prevent the Government from enacting various reforms and policies, including those seeking to address the humanitarian impacts of El Niño.

Organised crime poses significant protection risks to the Guatemalan population. The Maras Salvatrucha and Barrio 18 gangs engage in violent crime, extortion, and forced civilian recruitment (Protection Cluster 20/12/2023). Violence is particularly high in Escuintla, Izabal, Petén, and Zacapa departments (ICG 30/01/2024).

Displacement

An increasing number of refugees and migrants are transiting through Guatemala, primarily on their way to North America. Between April–September 2023, the IOM observed over 100,000 refugees and migrants moving through Guatemala. These refugees and migrants, some of whom are stranded for long periods in Guatemalan host communities, are more vulnerable to varied needs and increase pressure on WASH and health infrastructure (IOM 10/10/2023).

Drought and associated humanitarian needs also increase the migration of Guatemalans, both to urban centres and abroad (FAO 2021). This has exposed Guatemalans to protection risks, as they incur debts to pay smugglers to take them on dangerous routes (HRW 15/11/2023).

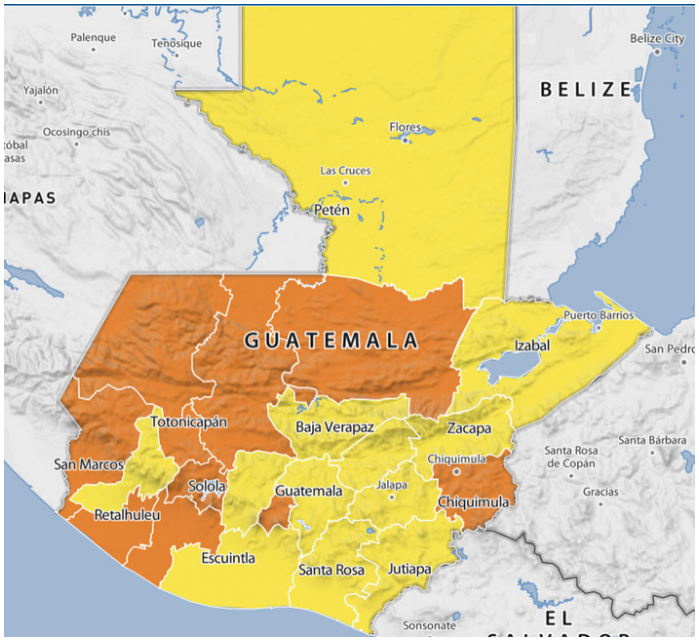
HUMANITARIAN RESPONSE AND CONSTRAINTS

The protection sector received the most funding in 2023, which still met only around one-third of requirements. The food security sector was around 40% funded, while the nutrition sector received only USD 200,000 of its USD 16 million funding requirement (less than 2%) (OCHA 19/02/2024). In 2024, over 30% of the population in Guatemala (5.3 million people) is in need of humanitarian assistance, including 4.4 million people in need of emergency food assistance. The Humanitarian Response Plan is planning to target 2.5 million people (about 47% of those in need) (OCHA 13/12/2023). As at December 2023, USD 125 million was required for the response (OCHA 07/12/2023).

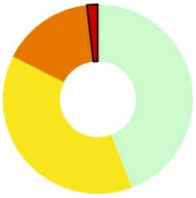
As a result of inadequate funding, the WFP has reached less than 50% of people targeted for food assistance in 2024 (reaching only 90,000 of 195,000 people) (WFP 05/03/2024).

As at July 2023, Guatemala was experiencing low access constraints, with the exception of constraints in the physical environment (ACAPS 05/07/2023). Remote and mountainous areas may be difficult to access, particularly during the May–October rainy season (OCHA 20/12/2023; WB accessed 11/03/2024). Decree 4-2020, which came into force in June 2021, requires international and local NGOs to undergo burdensome registration procedures and increases Government discretion over their activities. That said, human rights NGOs are more likely to experience negative effects from the decree than humanitarian organisations, particularly those working in food security and other areas of priority for the Guatemalan Government (Alternatives Humanitaires 20/11/2023; AI 13/02/2020).

FOOD INSECURITY IN GUATEMALA AS AT FEBRUARY 2024



2nd Projected: Sep 2023 - Feb 2024



Phase	Population	%
Phase 1	7,774,134	44
Phase 2	6,732,312	38
Phase 3	2,772,536	16
Phase 4	323,448	2
Phase 5	0	0

Population P3+	%
3,095,985	18

Source: IPC (accessed 07/03/2024)