



Summary

The purpose of this document is to present the anticipatory action (AA) for drought in El Salvador Dry Corridor, including objectives, context in the Dry Corridor, crisis timeline, and the action plan. It is part of the Regional Dry Corridor Anticipatory Action Framework, which also includes Nicaragua, Honduras, and Guatemala.

Objectives of anticipatory action within the El Salvador Dry Corridor

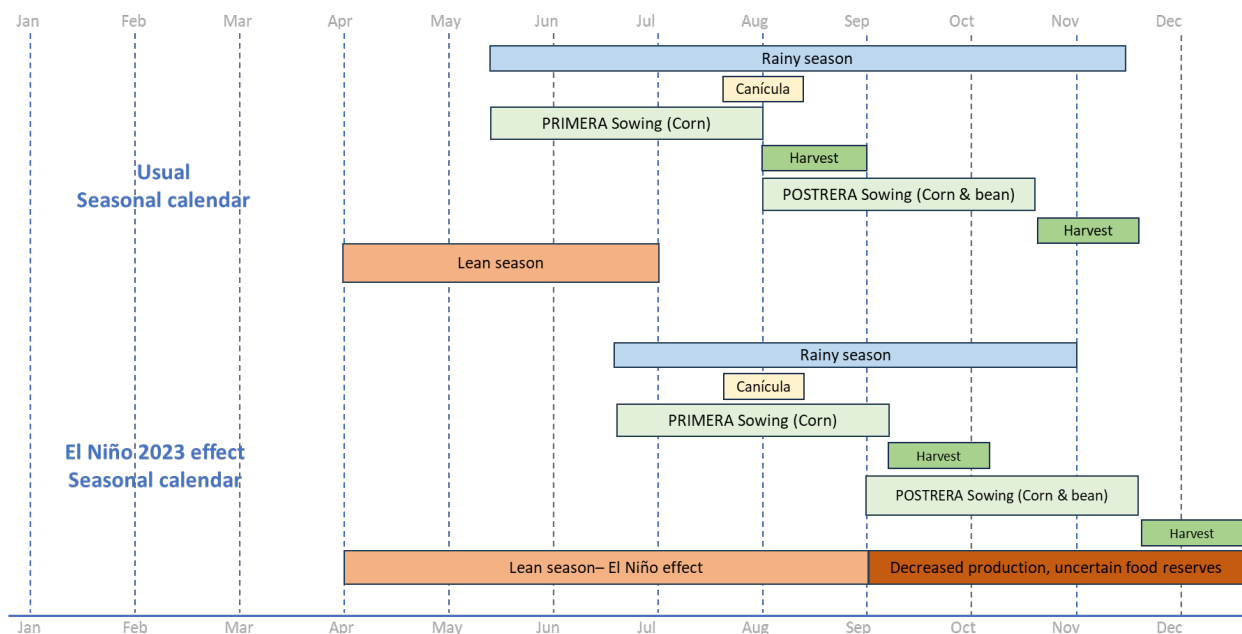
The main objective is to reduce the humanitarian impact of drought on people at risk in the Dry Corridor in 2024 or 2025. In other words, once a severe drought is forecast, the aim is to reach many vulnerable people identified within the Dry Corridor most vulnerable areas to drought before the humanitarian impact of the shock, with multi-sectoral interventions led by UN agencies and their partners, complementing the Governmental contingency drought plan.

Drought in the Dry Corridor – EL SALVADOR

The Dry Corridor is a tropical dry forest region on the Pacific Coast of Central America. This area, which extends from southern Mexico to Panama, is extremely vulnerable to climate change due to much of the population living in rural areas and poverty, and thus dependent on grain crops for their livelihood, and particularly vulnerable to climate change.

Over an El Niño period, there is a significant risk of below-average rainfall in El Salvador, which could severely impact agriculture and food security in the region. Figure 1 below shows the seasonal calendar in 'normal' and in 'El Niño' years. El Niño phenomenon brings a delayed start of the season, and below-normal rainfall, adversely affecting the sowing and growing of the main maize cropping season in El Salvador. This situation may result in reduced yields, crop damage - losses, and an increased number of food insecure people.

Figure 1. Seasonal Calendar in El Salvador



An El Niño event aggravates dry conditions by bringing poor spatial and temporal distribution of rains during a critical stage of crop development, often causing a late onset to the rains and/or increased dry spells, threatening an already fragile agricultural sector marked by low resilience and inadequate preparedness to handle weather shocks. In 2023, due to the start of the El Niño phenomenon, sowing started one month later than normal, and so did the harvest. Smallholder families will experience this impact on food security due to the extension of the lean season until September, and lower crop production. Moreover, the lean season period can lengthen even more due to low productivity and harvest losses. This could be worse if the rainy season in 2024 or 2025 will be again much lower than normal

Based on data survey by FAO and WFP on May 2023, the Humanitarian County Team (HCT) have determined that 1,000,000 peoples¹ are food insecure. The above situation is expected to intensify food insecurity and increase the number of people in need for humanitarian assistance. Other potential impacts of concern include rising food prices and the increase in malnutrition. In context of drought, the overall nutritional intake decreases, and poor households are at higher risk to suffer multiple micronutrient deficits, contributing to higher prevalence of underweight and stunting among children under five (especially for reduced ability to access food, particularly animal-sourced foods high in caloric energy, protein, and fat). During droughts, access to water is reduced both in terms of quantity and quality - at home, in schools and in health-care-facilities – increasing the risk of spreading respiratory diseases, and acute diarrheal diseases and other water-borne diseases, especially in children living in unplanned urban dwellings. Remaining productive water points are more vulnerable to contamination and are used by a growing number of people, and the risk of over-abstraction can foster tensions between users. The increase of diseases is reinforced by poor sanitation and hygiene practices, compounded by the proliferation of vector-borne diseases in unsafe environments (including zika, yellow fever, dengue, etc.).

Gender inequities intensify during droughts. Water scarcity affects menstrual hygiene in young girls and women, while children (often responsible for collecting the water) spend less time at school, with an enormous burden aggravated by higher exposure to safety risks and exploitation while fetching water. Moreover, poor nutrition can impact the school performance of students, their motivation to attend school, and acquisition of knowledge and skills necessary to advance. The disruption of education and the lack of a safe and protective environment for children amplifies their risk of exposure to violence and other risks, especially those whose families have been fragmented due to internal displacement or migration.

Droughts also affect poverty, violence, and migration. The poorest households in El Salvador are considered the most at-risk since they have seen their livelihoods deteriorate and have been forced to employ unsustainable coping strategies² until the arrival of the first harvest in September. El Niño is expected to further affect the capability of vulnerable households to access quality services, including indigenous groups.

Poorest households suffer a significant narrowing of income generation options, which leads to high-risk activities that can lead to progressive draining of economic assets and stocks and increasing inequality and marginalization for the most vulnerable. Children are most at risk of being left with limited or no access to essential services and may be forced into child labor to compensate for the loss of agriculture and livelihoods. This change in livelihoods can produce an increase of insecurity, especially for women and children, with increased risk of being exposed to internal or international migration, exploitation, and abuse, including sexual, as extreme survival strategies, with further limitation of children attending schools, due to the households needs for economic support and an increased risk of child labor and exploitation.

Crisis timeline

Figure 2 – Crisis timeline

CALENDARIO DE ALERTAS Y ACCION ANTICIPATORIA - CRONOLOGIA DE LA CRISIS - EL SALVADOR												
MES	ENERO	FEBRERO	MARZO	ABRIL	MAYO	JUNIO	JULIO	AGOSTO	SEPTIEMBRE	OCTUBRE	NOVIEMBRE	DICIEMBRE
CLIMA												
Epoca de lluvia						Periodo Lluvioso - Primera			Periodo Lluvioso - Postrera			
Epoca seca	Epoca seca							Canicula				Epoca seca
Temporada ciclónica								Pico		Pico		
ACTIVIDADES AGRICOLAS												
Maiz Primera					Preparación	Siembra	Crecimiento		Cosecha			
(Frijol Primera)					Preparación	Siembra	Crecimiento		Cosecha			
Maiz Postrera	Cosecha							Preparación	Siembra	Crecimiento		Cosecha
Frijol postrera								Preparación	Siembra	Crecimiento	Cosecha	
IMPACTO POTENCIAL DE LA SEQUÍA Y HAMBRE ESTACIONAL												
Impacto sobre cultivos - Primera												
Impacto sobre cultivos - Postrera												
Hambre estacional												

Triggers and thresholds

¹ Peoples in Need (PIN) estimation for the Humanitarian Needs Overview (HNO-2023). Food Security Cluster – HCT.

² FAO-DIEM Survey, 2022 and 2023 / WFP ENSAN Survey, 2022 and 2023.

Triggers are based on seasonal precipitation forecasts. The thresholds established by CERF are set based on a 1 in 4-year return period/activation rate for each of the 4 countries.

“**Window A**” - activities are triggered if the seasonal forecast (ECMWF or National) for the MJJA season is below the 1 in 4-year Response Period/activation rate threshold. The MJJA seasonal forecast will be monitored by MAM.

“**Window B**” activities are triggered if the seasonal forecast (ECMWF or National) for the SON season is below the 1 in 4-year Response Period/activation rate threshold. The SON seasonal forecast will be monitored over JJA.

Figure 3 - WINDOWS: **monitoring** & **trigger windows (forecasted period)**

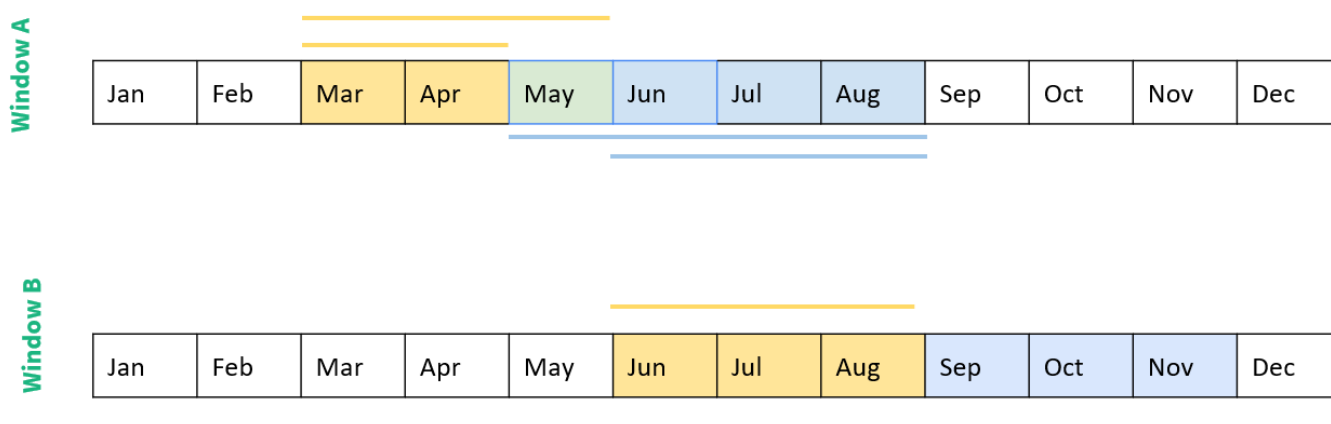


Figure 4 - Trigger matrix

Trigger window & timing	Indicator	Source ³	Trigger
Window A (March-May) Primera	MJJA Seasonal Forecast	Global forecast (ECMWF) or National forecast	MJJA precipitation <= 1 in 4-year RP
Window B (June-August) Postrera	SON Seasonal Forecast	Global forecast (ECMWF) or National forecast	SON precipitation <= 1 in 4-year RP

Priority interventions

Food Security

³ This framework relies on the European Centre for Medium-Range Weather Forecasts (ECMWF), as the sole provider of data for monitoring and possible activation. ECMWF allows the historical analysis of rainfall performance over a statistically meaningful period. It also guarantees the availability of forecast for the entire duration of the framework. Stakeholders that are part of this framework will continue their engagement with national entities and authorities to have relevant weather data and statistics available, so as to rely on national Weather Institutes in a foreseeable future, for similar AA frameworks.

FAO will prepare small farmer in order to anticipate El Niño effects and protect food production. They will be provided with forecasts on the climate and El Niño phenomenon to be aware; training, tools and assets will be delivered for water infiltration and harvesting; drought tolerant seed (corn & beans) and fertilizer will be distributed prior Primera and Postrera sowing to produce food (corn) and seeds (beans) for the Postrera sowing; vegetables, eggs and chicken will be produced at community level; training and assets to reduce postharvest losses will be provided and behavior change to early harvesting will be promoted.

WFP will provide cash-based transfers to Participants; produce food locally through community gardens, some of them, equipped with water harvesting systems; and will provide silos for food reserves storage.

Nutrition:

Early identification and referral to life-saving treatment (reinforced surveillance, screening, prepositioning of supplies and its distribution, technical nutritional guidelines, nutritional messages dissemination and health and nutrition training).

Water, sanitation and Hygiene:

Training of local community water operators on water quality monitoring and climate resilient water safety plans, including equipping with water quality monitoring supplies. Repair or rehabilitation of community water systems (existing systems); installation of rainwater harvesting systems or community water storage and collection systems (safe water points). Distribution of supplies for household water collection, treatment and storage, personal hygiene supplies, supplies for cleaning and disinfection of spaces and prevention of mosquito-borne diseases at the household level (mosquito nets and organic repellent). Awareness raising about safe water management, personal hygiene, and prevention of water-borne and vector-borne diseases.

Health

Ensure the continuity of essential and emergency health services in health facilities in drought-affected communities to alleviate pain and prevent deaths, improve immediate access to health for the most vulnerable population, through the distribution of equipment, resources and supplies to manage the epidemic outbreak locally quickly and efficiently.

Objective of the AA Framework in El Salvador: Timely Anticipatory Action save lives against impact of El Niño.			
Outcome(s) of the AA Framework: reduce the humanitarian impact of drought on people at risk in the dry corridor in 2023 or 2024 through a multi-sectoral package of projects that unfold as soon as the trigger threshold is reached.			
Sector	Agency	Activity	Lead time ⁴
Food Security	FAO	<p>Window A</p> <ol style="list-style-type: none"> Dissemination of forecasts on the climate and El Niño phenomenon. Training to farmers and distribution of assets for infiltration and water harvesting practices Distribution of drought-tolerant staple grains seeds and fertilizers for Primera sowing Distribution of inputs for vegetable and poultry production at community level Implementation of vaccination campaigns (livestock, backyard chickens) <p>Window B:</p> <ol style="list-style-type: none"> Provision of training and assets to reduce postharvest losses (behavior change on harvesting promoting early harvesting, providing assets as silos and building grain drying sheds). Distribution of drought-tolerant staple grains seeds, and fertilizers for Postrera sowing. 	<p>Window A</p> <ol style="list-style-type: none"> March – April March - April March – May March – May March – April <p>Window B</p> <ol style="list-style-type: none"> Jun – Ago July – Sept

⁴ Lead time is the time required by the Agency to deliver the assistance at 'final beneficiary level', starting from the activation. It is required to calculate what is the **latest possible trigger activation time/date**, that would still allow to deliver assistance 'on time'. In this context, the Lead Time is comprised by two components (months): 1. The **latest** possible month of activation and 2. The month in which beneficiaries receive assistance.

Food Security	WFP	<p>Window A</p> <ol style="list-style-type: none"> 1. Cash-based transfer 2. Establishment of 10 community gardens with irrigation systems. (400 People) 3. Establishment of 5 community gardens with water harvesting systems. (400 People) <p>Window B</p> <ol style="list-style-type: none"> 1. Cash Based Transfer 2. Establishment of 15 community gardens with irrigation systems. 3. Establishment of 5 community gardens 4. Delivery of 200 silos, 18 qq capacity (2 per family). 	<p>Window A</p> <p>April-June April-June April-June</p> <p>Window B</p> <p>Aug-Sept July-Sept July-Sept Aug-Oct</p>
2 sectors: Nutrition and WASH	UNICEF	<p>Window A</p> <p>Nutrition:</p> <ol style="list-style-type: none"> 1. Training health providers to strengthen their capacities in nutritional surveillance and active community-level outreach. 2. Nutrition screening and nutritional surveillance at community level in coordination with national and community authorities. 3. Supply of tailored nutritional prepositioned materials to children, pregnant women, and nursing women in coordination with the Ministry of Health. <p>WASH:</p> <ol style="list-style-type: none"> 4. Repair or rehabilitation of local water systems, installation of rainwater harvesting technologies and safe water points for storage at community level. 5. Training local water operators on water quality surveillance at community level. <p>Window B:</p> <p>Nutrition:</p> <ol style="list-style-type: none"> 6. Dissemination of messages for prevention of malnutrition and safe water management in drought situations. 7. Distribution of therapeutic food and micronutrients for children with severe and moderate acute malnutrition, pregnant and nursing women in communities and healthcare facilities. <p>WASH:</p> <ol style="list-style-type: none"> 8. Distribution of supplies for safe water management, prevention of vector diseases and hygiene at the community level. 9. Quick training on safe water management and personal hygiene at the community and scholar level. 10. Repair or rehabilitation of local water systems 	<p>Window A:</p> <ol style="list-style-type: none"> 1: March – April 2: March – April 3. March – April 4. March – April 5. March – April <p>Window B:</p> <ol style="list-style-type: none"> 6. June – July 7. June – July 8. June – July 9. June – July 10. June – July

HEALTH	PAHO / WHO	<p>Window A</p> <ol style="list-style-type: none"> 1. Distribution of equipment, resources, and supplies to manage the epidemic outbreak locally quickly and efficiently. Ensuring the continuity of essential health services in drought-stricken establishments by providing: 2. Delivery of risk mitigation messages vulnerable population and their communities to cope with drought and the health risks it entails, allowing them to make informed decisions, mitigate the dangers of the threat, and pursue actions that protect their physical and mental well-being. 3. Implementation of the Early Warning, Alert and Response System (EWARS) model to predict the risk of vector-borne diseases outbreaks (mainly dengue, chikungunya and zika). <p>Window B</p> <ol style="list-style-type: none"> 4. Monitoring of water quality by local health facilities and health workers and provision of home-based drink water treatment. 5. Distribution of equipment and quick training of the local health personnel for the early identification of health complications, alleviating pain, and preventing death, so that they can bring health services closer to the most vulnerable communities affected by drought 	<p>Window A</p> <ol style="list-style-type: none"> 1. March – May 2. April – May 3. April - June <p>Window B:</p> <ol style="list-style-type: none"> 4. June – August 5. June – August
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Targeting

UN Agencies and national meteorological services will lead the targeting with a set timeframe and criteria via:	
Geographical	<p>Select areas of intervention through:</p> <p>To define the geographic area, an intersectoral analysis exercise was carried out where national maps were overlapped and analyzed variables (see annexes - Sources) such as:</p> <ul style="list-style-type: none"> - Recurrence of areas with high levels of water stress; - Forecasts of the presence of El Niño in 2023 and 2024; - Moisture Index of Extreme or Very Dry Soils; - Climate Perspective for Central America; - Data from the Humanitarian Country Team (HNO); - Survey of food insecurity; - Government reports on areas with crop losses; - Indices of cases of arboviral disease -especially dengue. <p>After this analysis and under the judgment of experts (leaders of Food Security, WASH, Health, and Nutrition sectors), it was decided to implement CERF AA resources on the department of San Vicente since it is among the most affected in the Dry Corridor and with high records of populations with multiple vulnerabilities, it would also be complemented with other emergency response actions that are being proposed in the Usulután department, located next to San Vicente.</p>
People affected	The identification of the affected population will be focused on prioritizing families at high risk of food insecurity who live in the department of San Vicente where rain patterns threaten to exacerbate the impacts of the drought. These families will primarily be subsistence farmers, single parents and with the presence of boys, girls, pregnant

women, breastfeeding women, etc.

A comprehensive interagency intervention is proposed, where families are also selected in a coordinated manner according to the specific productive, food security, health, and nutrition needs, as well as their water, sanitation, and hygiene conditions. The number of people to be defined will depend on the resources assigned to the country. The selection of population by sector will be based on the main data that is handled, such as:

Food security: Based on data survey by FAO and WFP on May 2023, the Humanitarian County Team (HCT) have determined that 1,000,000 peoples⁵ are food insecure. The situation is expected to intensify food insecurity and increase the number of people in need for humanitarian assistance.

WASH: The population to prioritize are subsistence producing families, living invulnerable households, preferably single-parent households, with the presence of boys and girls, nursing mothers, women, etc. with high nutritional risks and problems with access to water, sanitation, and hygiene. The People in Need (PIN) for the nutrition sector is 807k.

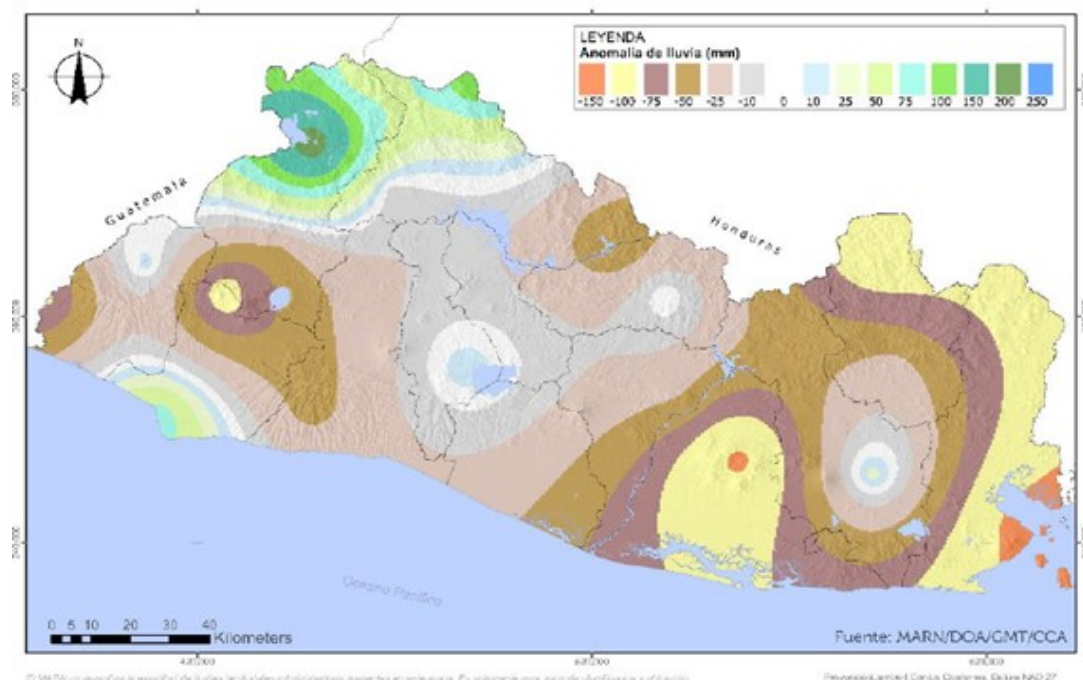
Nutrition: The People in Need (PIN) for the nutrition sector is 227k. Children, pregnant women, and nursing women will be prioritized.

Health: 288K Health Sectoral PIN, affected people by water-borne, food-borne, vector-borne, respiratory and, arboviral diseases typically associated with drought events; users of basic health services, especially children, pregnant adolescents, and women.

⁵ People in Needs (PiN) estimation for the Humanitarian Needs Overview (HNO-2023). Food Security Cluster – HCT.

ANNEX

Perspectiva de anomalía de lluvia (mm) para trimestre agosto a octubre 2023 en El Salvador



Sources:

- DOA-MARN: Extreme or very dry Soil Moisture Index located in department of La Unión; south of Morazán, San Miguel, Usulután and San Vicente; south-west of Sonsonate; and West of Santa Ana, border with Guatemala., (August 10, 2023).
- CRRH - LXXII Climate Outlook for Central America / August - October 2023. Below normal rainfall to the east, in the departments of La Unión, Morazán, Usulután, and the south sector of San Miguel, San Vicente and La Paz.
- Humanitarian Country Team (HCT) / Humanitarian Needs Overview (HNO): six departments of El Salvador classified as severity 3 (Ahuachapán, La Unión, San Miguel, Morazán, San Vicente and Santa Ana); and two departments severity 4 (Sonsonate and Usulután).
- FAO / DIEM-ENSAMv survey (April-May 2023): basen on food security indicators, coping strategies, shocks and needs at household level, DIEM prioritize La Unión, San Vicente, Ahuachapan, Usulután, Morazán, San Miguel and Sonsonate.
- WFP-ENSAN survey (Junio 2023):
- FEWSNET (Forecast valid from September 14 to 20, 2023) : The 30-day rainy period shows that northern and southern Guatemala, northeastern El Salvador, southern Honduras, parts of Nicaragua, and many parts of Costa Rica and Panama received less than 50 percent of normal rainfall.
- Consideration for onset of the rainy season and/or consideration for agricultural conditions (Agricultural Stress Index System, ASIS).
- MAG-CENTA (Sept.2023): the most affected corn areas are located in six departments: Usulután, Santa Ana, Ahuachapán, Chalatenango, La Libertad, San Vicente. 47% of corn crops are affected by drought, mainly in the dry corridor, and it is expected an overall loss around 18.65% at national level (equivalent to 2,578,301 quintal)
- MINSAL/Epidemiology (2023): 19K cases of arboviral disease -especially dengue-, the most affected departments were Chalatenango, Cuscatlán, Cabañas, Usulután, Santa Ana, and Sonsonate, according to the 2022 rate per 100,000 population (by department).
- SLV-Health Cluster (2023): 288.5K people in health humanitarian need, 204K of them are children under 5 years and 72.7K pregnant women. The most affected departments were Santa Ana, Sonsonate, San Miguel, Ahuachapán, Usulután, La Paz y Cuscatlán.