1 Any comments or questions? Please contact us at info@acaps.org

VENEZUELA Anticipation of flooding

CRISIS IMPACT OVERVIEW

Since 26 May, there have been heavy rains across Venezuela, especially in the states of Zulia, Táchira, Mérida, Trujillo, Amazonas, Bolívar, Delta Amacuro and Esequibo (La República 15/06/2023; IFRC 12/07/2023). The first tropical wave (an elongated area of relatively low air pressure, which moves from east to west across the tropics) of the rainy season (typically between May and November) occurred in June and resulted in flooding, mainly affecting the states of Barinas, Carabobo, Cojedes, Mérida, Portuguesa, Táchira, Trujillo and Zulia (VOA 01/06/2023). In the state of Portuguesa, this first wave affected around 5,100 people (1,200 families), causing damage to houses and blockages in drainage systems (Infobae 07/06/2023). In Barinas and Tachira states, more than 510 people (120 families) were affected by floods (Defensoría del Pueblo 02/06/2023).

Between June and July there have been 19 tropical waves, that have brought heavy rains, floods and landslides across the country (Efecto Cocuyo 16/07/2023; El Carabobeño 15/07/2023). Despite advances in risk and disaster prevention measures during the rainy seasons, at least 645,000 people (150,000 families) remain at risk in the states of Apure, Aragua, Portuguesa, Sucre, and Vargas (IFRC 12/07/2023). Only in the Delta Amacuro state around 7,500 individuals are affected by 2023 floods (OCHA 17/07/2023).

During the 2022 season, heavy rains in Venezuela affected approximately 14,000 households (IFRC 12/07/2023). From April to December 2022, the states of Mérida, Zulia, Trujillo, Táchira and the Capital District remained in a state of emergency because of rains and their subsequent impacts (IFRC 17/12/2022). Because of flooding and landslides, the population mainly required shelter, livelihoods, health, psychosocial and mental health support, water, sanitation and hygiene promotion (IFRC 12/07/2023).

Venezuela had a score of 4.2/10 on the INFORM climate change risk index. The index predicts no change in flood risk in the country through 2050, but expects increasing impacts of coastal flood as a result of the increased impacts of hurricanes in the region (EU accessed 17/06/2023).

ANTICIPATED DEVELOPMENTS/IMPACTS

According to the National Institute of Meteorology and Hydrology (INAMEH), rains are expected to continue over most of the country and will mainly affect the states of Zulia, Los Andes, Llanos Occidentales and Llanos Centrales; Centro Norte Costero, Delta Amacuro, Amazonas, Bolivar and El Esequibo (El Universal 13/07/2023). The hurricane season began on 1 June and the likelihood of heavy rainfall will increase in the coming months (IFRC 12/07/2023; La República 15/06/2023).INAMEH forecasted at least 65 tropical waves during the 2023 hurricane season (June to November). Owing to the increase in temperatures in the Caribbean sea caused by the El Niño phenomenon, the hurricane season is likely to have a greater impact on the most vulnerable populations, especially women, children and the elderly (IFRC 12/07/2023; La República 15/06/2023).

Although the onset of the El Niño phenomenon in April forecasts low rainfall and drought in some regions of Venezuela, increasing temperatures in the Caribbean Sea and the Atlantic Ocean could potentially enhance the formation of tropical storms and hurricanes (IFRC 12/07/2023; RunRun 16/03/2023; Urgente24 14/07/2023), The effects of the El Niño phenomenon may also enhance the effect of the coastal El Niño phenomenon with heavy rainfall expected in Peru and Ecuador, possibly affecting coastal areas of Venezuela and Colombia (IFRC 12/07/2023; Gobierno Bolivariano de Venezuela accessed 16/07/2023).

Delta Amacuro state is exposed to floods from the Orinoco river from May to October each year. In previous years, a range from 13,000 to over 19,000 people have been affected and the state cannot cover the needs of these communities (OCHA 17/07/2023). The overflow of the river and the changing tides are likely to affect this and other coastal states in the oncoming months.

O KEY FIGURES

645,000 PEOPLE PROJECTED TO BE AT RISK

46 TROPICAL STORMS FORECASTED FOR THE REMAINDER OF 2023

4.2 INFORM CLIMATE CHANGE RISK SCORE

High-risk states

ZULIA, MÉRIDA, TRUJILLO, TÁCHIRA, AMAZONAS, DELTA AMACURO, AND ESQUIBO

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Anticipatory note

20 July 2023

CRISIS IMPACTS

Shelter

In 2022, heavy rains that resulted in floods displaced almost 60,000 people across Venezuela. The majority of the displaced population were accommodated in temporary shelters or by relatives in unaffected areas (IFRC 17/12/2022). Rebuilding homes can take weeks or months as flood waters will take time to subside, thus tents or temporary shelters will be needed for communities in affected states. Lack of shelter will mean displaced communities will be exposed to harsh weather condition that may have negative effects to their health. In addition, affected communities will likely need mosquito nets, cooking utensils, and clothing as in previous floods (World News 29/04/2022).

Health and WASH

As a result of the economic, social and political crisis in Venezuela, as of January 2023, around 7.13 million Venezuelans have migrated out of the country, including medical personnel (R4V accessed 17/07/2023). The capacity of the Venezuelan health system is low because of staff shortages, combined with lack of medical supplies and poor infrastructure (HRW accessed 16/07/2023; WOLA accessed 16/07/2023). According to a 2022 National Health Survey, only 47% of hospitals in Venezuela had access to supplies (Pulitzer 01/02/2023). According to a 2021 survey, citizen's use of public services had decreased by 70%. At the same time, health care costs had increased, particularly in private clinics where prices had risen significantly. 13 percent of patients who sought medical attention in outpatient clinics within the public system had to pay for the services they received. Similarly, 16% of those who utilized public hospitals had to make payments for certain aspects of their healthcare. Moreover, in 65% of cases, individuals had to bear the cost of prescribed medications themselves, suggesting that a considerable portion of the population is facing out-of-pocket expenses for necessary medicines. This revealed a growing financial burden on individuals seeking healthcare services, and could be contributing to the decreasing utilization of public services. The rising cost of healthcare in private clinics and the need to pay for services and medications in public facilities may force some citizens to opt for alternative healthcare options or delay seeking medical attention altogether (IPS 16/12/2022).

In 2021, almost 30% of the country's population did not have access to WASH. The rainy season is often accompanied by an increase in waterborne diseases, respiratory diseases, skin diseases, malnutrition and people injured (IFRC 17/12/2022; RunRun 09/2022; The Borgen Project accessed 17/07/2023). Heavy rains in 2022 damaged water systems, and the flooding

resulted in the contamination of water resulting in the spread of waterborne diseases in affected communities (IFRC 17/12/2022). The further deterioration of water quality and sanitation conditions has caused respiratory infections and skin diseases (OCHA 17/07/2023).

The limited capacity of the health system coupled with an increase in the number of people requiring care in the coming months could further reduce the capacity of disease prevention and care programmes (IFRC 12/07/2023). Although the country's malaria figures have not been updated since 2016, standing water as a result of flooding will pose a risk of transfer of communicable diseases such as malaria in affected areas. (MSF 10/09/2021)

Food security and Livelihoods

The country is facing a severe food insecurity crisis, with up to 4 million people expected to experience Crisis–IPC 3–or even worse levels of acute food insecurity through November 2023. The situation is particularly dire for many poor households living in or near Caracas Capital District and Zulia State. The crisis has been exacerbated by limited access to social protection systems and remittances, leaving vulnerable populations without adequate means to secure sufficient food (USAID 22/06/2023).

A survey conducted by the Andrés Bello Catholic University in 2021 reported a decline in the population's food insecurity by 10% (from 88% to 78%) as a result of reduced poverty levels and introduction of school feeding programs and food assistance to poor households by the government (IPS 16/12/2022).

In 2022, floods also resulted in soil saturation and loss of farm tools, especially in the rural areas resulting in poor crop production (IFRC 17/12/2022). Inflation has resulted in citizens' low purchasing power reducing communities' ability to purchase staple foods, particularly affected are communities around urban and peri-urban areas around Caracas and in the Zulia region (FEWS NET 15/06/2023; Reuters 07/03/2023). During floods, the risks of malnutrition and food insecurity increase, particularly for children. In Delta Amacuro, 95% of the food consumed depends on the state social assistance which is likely to be constrained during floods and climate hazards (0CHA 17/07/2023).

DRIVERS OF THE CRISIS

Exposure to climate change and lack of disaster preparedness

Because of its location, Venezuela is one of the countries in Latin America with the greatest exposure to climate change (DW 27/12/2022; RunRun 09/11/2022). Despite the government's acknowledgement of Venezuela's vulnerability to the impacts of climate change, there are no specific strategies or policies to deal with the crises related to this phenomenon, which reduces its capacity to respond (DW 27/12/2022).

During the rainy season, despite the fact that the most affected areas tend to be in the same states every year, there are no policies focused on measures to prevent the overflowing of rivers, the clogging of drains and the cleaning of natural drains (Asamblea Nacional 10/10/2022). The lack of access to information also makes it difficult for the population to take preventive measures against possible natural disasters during the rainy season (IFRC 12/07/2023; RunRun 09/11/2022).

COMPOUNDING/AGGRAVATING FACTORS

Economic crisis and political instability

The deepening political and socioeconomic crisis in Venezuela has led to the collapse of basic services and the deterioration of living conditions (R4V accessed 01/02/2023). The hyperinflation has reduced access to food, medicine, and other basic goods, while import restrictions hamper the general availability of goods. Although poverty fell by almost 15% (from 65.2% to 50.2%) from 2021 to 2022, 53.3% of the population were still living below the poverty line. Multidimensional poverty has led to the deprivation or deterioration of education, housing, overall access to public services, income, and employment (FA0 2023; Infobae 19/01/2023; France24 11/11/2022; IPS 16/12/2022). The long economic recession, despite the government's progress over the past year, means that the national capacity to respond to those affected and in need during the rainy season is low (IFRC 17/12/2022).

Fuel shortages and lack of road infrastructure

Fuel shortages resulting from the economic crisis tend to affect mobility and humanitarian access, especially in hard-to-reach areas. Lack of fuel has led to power outages, as it is not possible to power generators in some regions. Venezuela's remote location and lack of roads makes mobility difficult in certain regions. Venezuela's geography features mountainous,

jungle and desert areas that create logistical impediments to getting humanitarian aid to people in need (El Tiempo 22/06/2023; El Nacional 15/04/2023). In addition, the country has plans to remove subsidies on fuel later in. the year; this will cause an increase in the price of fuel further making it inaccessible to poor communities in the country (Bloomberg 14/07/2023).

In 2022, the floods had damaged roads and bridges and landslides rendered roads impassable thus disconnecting communities from markets (IFRC 17/12/2022). During the rainy season, landslides, mudslides and floods make mobility even more difficult, which, combined with fuel shortages, lead to delays and high costs in the delivery of humanitarian aid, especially in remote areas (IFRC 12/07/2023).

Refugee crisis

The political and socioeconomic crisis has resulted in a refugee crisis in the country More than a 1.1 million people have crossed the border to countries in the region. In general, almost 1.9 million people were in perpendicular movement i.e., in transit in and out of the country as at the end of 2022. Populations in transit in the country are as a result of cost of living rises in countries they had settled in, lack of documentation and their continuous irregular status, cases of xenophobia, and need to reunite with family in Venezuela. As a result, border states, especially Apure, Táchira and Zulia, recorded the highest refugee movement (RMRP accessed 19/07/2023; IOM 17/03/2023). The anticipated floods especially in border states will compound refugee needs as the government lacks adequate capacity to respond to already existing needs thus exposing refugees to risks such as waterborne diseases.

HUMANITARIAN RESPONSE

Humanitarian constraints

The heavy rains have so far caused landslides and mudslides, that could restrict the delivery of humanitarian aid. In addition, some communities live in remote areas that can only be reached by boat, the rain is likely to constraint the accessibility (MSF 17/07/2023; OCHA 17/07/2023; IFRC 12/07/2023).

If the rains continue with the same or greater impact in the coming months, access restrictions such as road blockages and clogged drainage systems are likely. During the 2022 rainy season, overflowing rivers caused flooding and landslides that affected roads, especially in areas of difficult access and poor road infrastructure. Clogged drains also hampered the delivery of humanitarian aid. Furthermore, heavy rains tend to affect electrical systems and

make it impossible for some remote communities to access power (IFRC 17/12/2022). Power outages are possible and may affect shortages or interruption of access to drinking water sources and medical services (IFRC 12/07/2023). In addition, lack of fuel access will affect humanitarian actors' responding to affected communities (El Nacional 15/04/2023).

Funding and response capacity

On 25 May 2023, the National Authorities in Venezuela activated the "Los Andes 2023 Task Force" to effectively address the challenges arising from the rainy season. The task force will focus on:

- a) Infrastructure and Services: The task force aims to assess and address the impact of heavy rains on infrastructure and essential services in the affected regions. This includes repairing and maintaining roads, bridges, utilities, and other critical facilities to ensure smooth functioning and connectivity.
- b) Administration of Public and Private Equipment: Another critical objective of the task force is to efficiently manage the available public and private equipment in the affected areas. This involves coordinating efforts to provide timely support and resources to communities facing challenges due to the rainy season.
- c) Creation of a Technical Scientific Committee: To prevent future weather-related emergencies, the task force is establishing a Technical Scientific Committee. This committee will thoroughly study all hydro-meteorological phenomena to develop well-structured projects and strategies to mitigate the impact of such situations in the future. The Los Andes 2023 Task Force, a Presidential Commission will also closely monitor the progress of the El Niño Phenomenon and its potential impact on weather patterns in Venezuela, enabling the government to implement appropriate measures promptly (IFRC 12/07/2023).

As at 17 July, humanitarian actors had started distributing jerrycans, water purification tablets, buckets and water filters to affected communities (IFRC 12/07/2023). As of May 2023, only US\$85 million (11.4%) has been mobilised for humanitarian assistance in Venezuela (0CHA 20/06/2023; 0CHA 14/06/2023).

Potentially affected states as of 11 July



Source: (IFRC 12/07/2023).

ANTICIPATED IMPACT OF FLOODS BY STATE.

STATE	MUNICIPALITIES EXPECTED TO BE AFFECTED	FAMILIES PROJECTED TO BE Affected	EXPECTED IMPACT	RESPONSE
Merida	10 of the 23 especially municipalities of the Pan-American Axis, Pueblos del Sur and Valle del Mocotíes	1,185 families	 Damage to dikes and aqueducts, causing the interruption in the distribution of drinking water to the communities Damage to access roads to the municipalities of the Pan-American Axis, Pueblos del Sur and Valle del Mocotíes could present a total interruption, limiting the entry of supplies, fuel and assistance to the impacted areas. Damage to upto 25% of houses in the state 	Temporary shelters could be activated in the facilities offered by the local authorities.
Delta Amacuro	Casacoima, Pedernales and Antonio Diaz municipalities and two terrestrial and fluvial parishes of the Tucupita municipality	1500 families	• Overflow of rivers and water systems in Casacoima, Pedernales and Antonio Diaz municipalities and two terrestrial and fluvial parishes of the Tucupita municipality.	
Bolivar	Gran Sabana	910 families	Overflow of the Uairén river, streams and lagoons causing the collapse of drainage systems	
Zulia	South of Lake Maracaibo and La Guajira, as well as other municipalities on the eastern shore of the Lake	1,200 families (35% of the total population)	 Damage to dikes Flooding of roads and houses Limited access to drinking water Flooding of agricultural land thus affecting livelihoods 	 Inadequate response capacity by local authorities is expected to affect response and thus extra capacity may be sought from humanitarian organizations. Some temporary shelters could be set up in the facilities offered by the local authorities.
Anzoátegui	10 of the 21 especially Metropolitan area of Barcelona, Puerto La Cruz, Guanta, Lecherías, Píritu, Puerto Píritu and riverine municipalities of river Neverí, Unare and Orinoco	2,450 families (30% of the total population)	Flooding of agricultural land thus affecting agricultural production	
Sucre state	Cumaná Municipality Sucre, Güiria Municipality Valdez, Cumanacoa Municipality Montes, Carúpano Municipality Bermúdez and Yaguaraparo Municipality Cajigal	2,918 families and 2,542 homes affected	Flooding of roads and housesLandslidesFlooding of agricultural land thus affecting livelihoods	

Source: (OCHA 27/06/2023; 31/05/2023; 02/06/2023; 05/06/2023; 31/05/2023; 09/06/2023; 30/06/2023; 16/06/2023);