

CRISIS IMPACT OVERVIEW

Hurricane Beryl hit Jamaica on 3 July 2024. The Category 4 hurricane is historically among the most powerful to have affected the country (BBC 06/07/2024). By 9 July, 1,876 people had evacuated from coastal areas, such as Old Harbour Bay in St. Catherine, to 160 shelters in safer areas (ECHO 09/07/2024). By 13 July, the number of people reported in emergency shelters had decreased to 180 in ten shelters. An unknown number of people were living with host communities (UNCT Jamaica 13/07/2024).

The most exposed parishes were **Clarendon, Manchester, St. Catherine, and St. Elizabeth in southern Jamaica, and Westmoreland in western Jamaica**. Less extensive damage was also reported in northern parishes of Hanover, Portland, Saint Ann, Saint Mary, and Trelawny. The damage has resulted in an immediate need for emergency shelter supplies and relocation assistance for those displaced. The humanitarian response has focused on these parishes because they also register the largest number of people affected (MapAction 10/07/2024 a; OCHA 08/07/2024; UNCT Jamaica 13/07/2024).

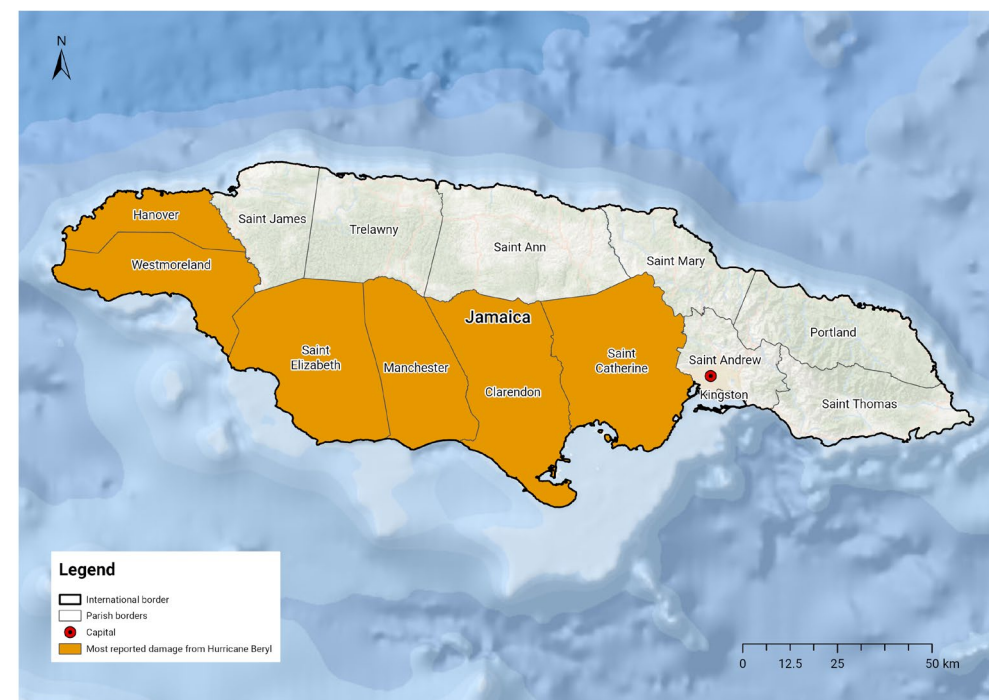
The main needs identified by 13 July were access to WASH, shelter repair and medical supplies, food, and livelihood support (UNCT Jamaica 13/07/2024). At least **160,000 people, including 37,000 children, are in need of humanitarian assistance countrywide** (UNICEF 12/07/2024).

Table 1. Post-Hurricane Beryl impact across Jamaica

IMPACT	TOTAL
Hurricane-related deaths	2
Injured people	60
Population in emergency shelters (13 July)	180
Shelters activated (13 July)	10
Population potentially affected	160,000
Children potentially affected	37,000

Sources: UNCT 14/07/2024; UNICEF 12/07/2024.

Map 1. Parishes with most reported damage from Hurricane Beryl



Source: ACAPS using OCHA accessed 12/07/2024.

information gaps

The hurricane has caused widespread electricity disruptions and communications infrastructure damage, complicating information gathering and hindering the efficient delivery of assistance in the affected areas.

Baseline information on population, poverty, and food security is not updated for all the affected parishes.

Anticipated scope and scale

- **The country is likely to experience food shortages in the coming weeks.** The hurricane has destroyed crops of Jamaican staple food such as plantains, yam, and cassava, as well as fruits including breadfruit, ackee, mangoes, and bananas. The fishing and livestock sectors have also reported extensive damage (AP 08/07/2024). At the same time, gas prices have increased, and the **food scarcity resulting from crop damage is likely to increase food prices, directly affecting food insecurity** (Jamaica Observer 10/07/2024; ABC 08/07/2024).
- The Columbia University seasonal forecast anticipates 50% above-normal precipitation in Jamaica between August–October 2024 (IRI accessed 15/07/2024). This will not give affected communities enough time to recover, exposing them to the consequences of heavy rains.
- **The impact of Hurricane Beryl is likely to affect agricultural jobs and farmers' livelihoods** because of the high dependency on agriculture and the loss of the season's harvest (The Gleaner 12/07/2024).
- In 2016, Hurricane Matthew increased the rate of informal employment in Jamaica, and Hurricane Beryl could produce the same results (OPM/WFP 30/04/2020). Hurricanes highly affect the tourism and agriculture sectors, resulting in economic losses that lead to company lay-offs, which then force people to look for informal employment. In October 2023, the total unemployment rate in Jamaica was approximately 4.2% (3.1% among men, 5.4% among women), with youth unemployment at 12.6% (STATIN accessed 11/07/2024).
- Jamaica faces a heightened risk of waterborne diseases, with dengue and malaria cases already reported prior to the hurricane.

Humanitarian constraints

- The preliminary state assessment identified over 500 parochial roads that the hurricane affected in various degrees (JIS 10/07/2024; Loop 10/07/2024). The actual figure is likely higher as data collection in rural and remote areas is still underway.
- Until 10 July, there were 200 main corridors, although all had a single-lane passage. **In Hanover, St. Andrew, and St. Thomas, 24 sections remained blocked** (JIS 10/07/2024).
- By 13 July, an estimated 60% of the population had no electricity (UNCT Jamaica 13/07/2024). Power infrastructure restoration was expected to take four to eight weeks. On 11 July, **70% of Westmoreland communities did not have electricity access** (Jamaica Observer 12/07/2024). The outage limited the humanitarian response and severely affected health facilities and shelters lacking electricity generators (UNCT Jamaica 09/07/2024; ETC/WFP 08/07/2024).

- By 9 July, the lack of electricity and damage from the hurricane affected 50% of the only two network operators (Digicel and Flow) (ETC 10/07/2024).
- **By 16 July, electricity was restored to some parts of St. Elizabeth parish** (Govt. Jamaica 16/07/2024).
- There is no available information on other possible barriers to humanitarian access in more rural parishes.

CRISIS IMPACTS

Wash

By 13 July, around 20% of the population had no access to the piped water system, who rely on water trucking, bottled water, and water tanks. **Access is particularly poor in Clarendon, St. Elizabeth, and Manchester parishes** (UNCT Jamaica 09/07/2024).

In 2022, WHO and UNICEF estimated that 91% of Jamaica's population (95% urban, 85% rural) had access to basic drinking water services, 5% had access to limited services, 2% used unimproved services, and 2% had no access at all. 87% of the population had access to sanitation services (83% urban, 91% rural), 12% had access to limited services, and 1% had no access at all (WHO/UNICEF accessed 11/07/2024).

By 10 July, there were 35 dengue cases reported countrywide (PAHO 10/07/2024). By 13 July, there were reports of increased mosquito presence in affected communities (UNCT Jamaica 09/07/2024). **Stagnant water and the upcoming rainy season are likely to increase the spread of the disease.** In September 2023, Jamaica reported a dengue outbreak, with 565 suspected and confirmed cases. Most were reported in Kingston, St. Andrew, St. Catherine, and St. Thomas (MOH 23/09/2023). Malaria was also reported in 2022 and 2023 (PAHO 01/09/2023).

Health

Around 82 health facilities have reported major damage countrywide (UNCT 14/07/2024). By 14 July, ten hospitals were operating on an emergency basis using generators and water tanks, although operations in many health facilities had started to be fully restored (UNCT Jamaica 13/07/2024). For instance, operations had been restored in the Spanish Town Hospital in St. Catherine, which spent several days in emergency mode after severe floods interrupted the specialised clinics, outpatient care, and surgical procedures catering to patients with chronic diseases and other conditions (The Gleaner 10/07/2024; Jamaica Observer 07/07/2024). The damage also affected medication storage (UNCT Jamaica 13/07/2024). **By 15 July, Rocky Point Hospital in Clarendon parish remained non-operational** (IMC 15/07/2024).

Until 6 July, most hospitals were fully relying on generators to maintain service delivery and operations as a result of electrical damage (CDEMA 06/07/2024; OCHA 06/07/2024). By 10 July, some hospitals still needed electricity generators (UNCT Jamaica 09/07/2024).

According to assessments, hospitals and health centres along the southern coast of Jamaica have suffered significant losses exceeding JMD 1 billion (approximately USD 6.4 million) (UNICEF 12/07/2024).

Shelter

On 3 July, all 12 parishes activated a total of 275 temporary shelters (CDEMA 06/07/2024). By 13 July, 180 people remained in ten shelters (UNCT Jamaica 13/07/2024). This indicates that people have been able to return to their houses or stay with relatives. There is no information on potential overcrowding and other conditions in host communities.

Some affected parishes have set up emergency shelter centres in schools and community centres. By 10 July, **these centres were facing challenges such as overcrowding and inadequate facilities** (IOM 10/07/2024).

Livelihoods

The Rural Agriculture Development Authority estimated nearly USD 16 million in agricultural damage affecting around 45,000 farmers. Damage was particularly severe on coconut and banana plantations in Westmoreland and St. James (UNCT Jamaica 13/07/2024).

The hurricane also caused extensive damage to crops in St. Elizabeth, the breadbasket of Jamaica. Some farmers in the parish have reported that the hurricane affected about 85% of their banana and plantain harvest (ABC 09/07/2024).

Jamaica's vulnerability to climate hazards significantly affects the country's main economic sectors, specifically tourism and agriculture (WB 15/07/2024). Together, these sectors comprise over 33% of employment (Statista accessed 09/07/2024; WB accessed 08/07/2024). Hurricanes also often affect labour-intensive industries, such as banana exports. In 2004, Hurricane Ivan led to the temporary loss of 8,000 jobs (OPM/WFP 30/04/2020).

Food insecurity

Damage to food stocks and livelihoods, along with the costs of shelter repair, will increase economic pressure on households and associated food insecurity (UNCT Jamaica 13/07/2024). Communities are experiencing food shortages and difficulties in accessing cooking resources (UNICEF 12/07/2024).

In May 2023, a WFP survey of over 1,600 Jamaicans (79% female, 21% male) from unspecified locations found that 33% experienced severe food insecurity and 37% experienced moderate food insecurity. **In 2023, food insecurity was 78% higher than during the start of the pandemic in 2020**, mostly affecting the most vulnerable, particularly those with lower incomes and those with disabilities or chronic illnesses (CARICOM/WFP 04/2024; WFP/CARICOM 22/09/2023). Core inflation in May 2024 was 5.2% (BOJ 28/06/2024).

Food access countrywide is highly dependent on imports. This leads to significant local food price fluctuations linked with global market dynamics. A May 2023 WFP survey of 1,607 people (79% women, 21% men) in unspecified locations found that 77% of respondents skipped meals, ate less preferred food, or went without meals for an entire day in the week leading to the survey (CARICOM et al. 22/09/2023; CARICOM/WFP 04/2024).

Impact on critical infrastructure

The electricity system, houses, and local infrastructure have proved to be vulnerable to strong hurricanes, and several houses, hotels, roads, schools, and health facilities across the country have reported damage from Hurricane Beryl (UNICEF 07/07/2024; Miami Herald 04/07/2024).

DRIVERS OF THE CRISIS

Hurricane season and climate change

Jamaica experiences hurricanes and storms between June–November each year (ODPEM accessed 15/07/2024). The power and intensity of Hurricane Beryl are most likely linked to climate change. Beryl formed before the usual hurricane season in the Caribbean (June–November), and the National Oceanic and Atmospheric Administration (NOAA) anticipates the 2024 Atlantic hurricane season to be 85% more active than normal (NOAA 23/05/2024). Affected communities may not be able to fully recover in time, exposing them further to the impact of future hurricanes and storms in 2024.

COMPOUNDING/AGGRAVATING FACTORS

Geographical exposure

Jamaica's geographical location makes it prone to climate hazards. Between 1980–2022, climate hazards affected over 2 million people (out of a total population of 2.6 million). Total adjusted damage amounted to USD 5.4 billion. Tropical storms continue to cause the largest natural disaster-related damage in Jamaica, resulting in 92% of reported total adjusted damage (CARICOM et al. 22/09/2023). In 2016, the annual average loss from hurricanes amounted to USD 67.3 million (0.5% of the GDP) (WB accessed 09/07/2024).

In a 2016 Pacific Disaster Center report, St. Catherine had the highest multi-hazard exposure to shocks, exposing a significant proportion of its population to the impacts of tropical cyclone wind, seismic activity, inland flood, and coastal flood. Clarendon parish had the weakest scores on economic capacity, governance, and communications infrastructure, constraining its coping capacity and making it the parish most vulnerable to shocks, including climate hazards. In 2016, St. Elizabeth and Manchester were not considered as exposed as other parishes, although Hurricane Beryl still affected them (PDC 2016).

Infrastructure vulnerable to climate hazards

The electricity system has not endured the effects of the hurricane. Houses and infrastructure have also been affected. In 2023, floods and landslides affected schools and houses on hills (The Gleaner 25/09/2023). In 2004, Hurricane Ivan damaged 13% of housing infrastructure, and the total damage to the housing sector amounted to USD 11,16 million (OPM/WFP 30/04/2020).

FUNDING AND RESPONSE CAPACITY

- By 16 July, states participating in the Caribbean Disaster Emergency Management Agency, together with regional and international affiliates, were coordinating the response in the country (CDEMA 12/07/2024).
- UN agencies and other organisations, including OCHA ROLAC, UNICEF, IOM, UNCT, and WFP, have been deployed to the island (UNICEF 07/07/2024).
- On 12 July, the Government of Japan published that it will provide emergency relief goods (tents, sleeping pads, portable jerrycans, etc.) through the Japan International Cooperation Agency (Govt. Japan 12/07/2024).
- The Government of Jamaica has been coordinating the response with the support of different organisations; for instance, the International Medical Corps has been supporting the Jamaican Ministry of Health & Wellness (IMC 15/07/2024)

Table 2. Pre-hurricane statistics on Jamaica

	NATIONAL	CLARENDON	MANCHESTER	ST. CATHERINE	ST. ELIZABETH
2011 total population	2,697,983	246,322	190,812	518,345	151,911
Under 15 years old (%)	672,400 (24%)	70,163 (28.5%)	48,314 (25.5%)	134,976 (26%)	39,999 (26.5%)
Over 65 years old (%)	295,000 (11%)	20,764 (8.5%)	18,385 (9.7%)	35,899 (7%)	15,171 (10%)
Projected population density (people/km ²)	257.27	206.5	230.5	206.92	125.48
People with disabilities (including those who self-identify as having 'some difficulty', 'much difficulty', or 'cannot do it at all' for each category)	46,000 (registered); 200,000 (according to the World Bank)	32,333 (sight); 7,762 (hearing); 12,558 (walking); 3,828 (communicating); 9,402 (lifting); 4,372 (self-care); 6,858 (remembering and concentrating)	28,219 (sight); 6,051 (hearing); 9,230 (walking); 2,992 (communicating); 6,986 (lifting); 3,348 (self-care); 5,022 (remembering and concentrating)	71,852 (sight); 12,722 (hearing); 21,945 (walking); 6,468 (communicating); 16,485 (lifting); 7,325 (self-care); 12,976 (remembering and concentrating)	22,185 (sight); 5,312 (hearing); 9,281 (walking); 2,932 (communicating); 6,481 (lifting); 3,015 (self-care); 5,126 (remembering and concentrating)
2011 poverty rate	17.1%	19.3–23.8%	22.4–24.3%	22.7–24%	23.8–24.4%
2023 food insecurity rate (moderate and severe)	70%	-	-	-	-
2024 malnutrition rate among under-five children	7%	-	-	-	-
2022 % use of basic water services	93%	-	-	-	-
2016 vulnerability score* (ranking)	-	0.678 (1/14)	0.436 (10/14)	0.430 (12/14)	0.664 (2/4)
2016 Coping capacity score (ranking)	-	0.411 (7/14)	0.340 (14/14)	0.467 (5/14)	0.401 (10/14)
2016 Multi-hazard exposure index (ranking)	-	0.728 (2/14)	0.528 (9/14)	0.989 (1/14)	0.130 (14/14)

Sources: FFTP (accessed 09/07/2024); JIS (accessed 09/07/2024); JIS (19/03/2024); JIS (accessed 11/07/2024) a; JIS (accessed 11/07/2024) b; JIS (accessed 11/07/2024) c; JIS (accessed 11/07/2024) d; ODPEM (accessed 10/07/2024); STATIN (accessed 11/07/2024 a); STATIN (accessed 11/07/2024) b; STATIN (accessed 11/07/2024) c; STATIN (accessed 11/07/2024) d; STATIN (accessed 11/07/2024) e; STATIN (accessed 11/07/2024) f; STATIN (accessed 11/07/2024) g; STATIN (accessed 11/07/2024) h; PIOJ/STATIN (accessed 16/07/2024); PIOJ et al. (15/03/2024); PDC (2016; WFP/CARICOM 22/09/2023).