CHILDREN UPROOTED IN THE CARIBBEAN

How stronger hurricanes linked to a changing climate are driving child displacement
Children Uprooted in the Caribbean

Note: This map does not reflect a position by UNICEF on the legal status of any country or territory or the delimitation of any frontiers.
Overview

The 29 Small Island Developing States (SIDS) in the Caribbean are home to a population of 43 million, including 12.6 million children. In recent years, these children and their families have become among the most vulnerable people in the world to being driven from their homes by drought, storms and flooding – events that are increasing in intensity and occurrence because of climate change and a warming planet.

In the past five years, the number of people internally displaced by storms and flooding increased six-fold in the Caribbean SIDS. From 2014 to 2018, 3.4 million people, including 761,000 children, were internally displaced. In contrast, more than 600,000 people, including 175,000 children, were displaced in the preceding five-year period from 2009 to 2013.

The primary cause of this dramatic increase in forced displacement was a series of catastrophic tropical cyclones or hurricanes that hit the region between 2016 and 2018 – including four Category 5 and two Category 4 storms. As categorized by the Saffir-Simpson Wind Scale, a Category 5 storm has winds of at least 157 miles per hour and a Category 4 storm has winds of at least 130 miles per hour.

If they make landfall, these storms – such as Hurricanes Harvey, Irma, Maria and Dorian – can be deadly and cause catastrophic damage to homes, infrastructure and economies. Some areas affected by Category 4 or 5 hurricanes have been left virtually uninhabitable.

Scientists agree that a changing climate means children and families who live in the Caribbean SIDS can expect to experience an increase in the proportion of Category 4 and 5 hurricanes in the coming decades. As a result, damage to infrastructure, agricultural land, essential services and livelihoods is expected to increase the level of population displacement within and across borders.

This forced displacement poses serious risks. For children, climate-related forced displacement places their lives, health, education and well-being at risk.

This child alert takes stock of the link between a changing climate, extreme weather events and forced displacement of children and families in the Caribbean SIDS. It also outlines child-sensitive actions under way to protect children and families. Finally, it calls on governments to take steps to help communities prepare and recover from catastrophic storms and protect children displaced by disasters related to climate change.
A changing climate

The United Nations Framework Convention on Climate Change (UNFCCC) defines climate change as “a change of climate attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to other natural climate variability that has been observed over comparable time periods.” Scientific evidence shows that human-caused carbon emissions and other greenhouse gas emissions are changing the temperature of the planet. Indeed, the five years from 2014 to 2018 were warmest on record.

It is not possible to definitively conclude that climate change was the sole cause of the Category 4 and Category 5 storms in the Caribbean SIDS since 2016 – or the resulting damage and displacement. But recent scientific studies indicate that rising sea levels and warmer ocean surface temperatures, both linked to climate change, are responsible for stronger and more damaging storms in the Caribbean. And scientists expect that climate warming will lead to a significant increase in the proportion of stronger hurricanes, including Categories 4 and 5 storms.

A 2012 study from the National Center for Atmospheric Research showed that since 1975, the proportion of Category 4 and 5 hurricanes has increased by 25 per cent to 30 per cent per degree of global warming. In 2015, the United States National Oceanic and Atmospheric Administration and Princeton University predicted an “increase in average cyclone intensity, precipitation rates, and the number and occurrence days of very intense Category 4 and 5 storms.”

BELOW: In November 2019, Alil Harris, 5, sits in his family’s tent in Codrington, on the island of Barbuda, which is part of the Caribbean nation of Antigua and Barbuda. Alil and his mother have lived together in this tent since receiving it as a donation after Hurricane Irma destroyed their home in September 2017.
ABOVE: Jacey Anselm, 9, hugs her dog Sassy close in September 2017, about a week after Hurricane Maria tore her family’s home apart in Loubiere, about 15 minutes’ drive from Roseau, the capital of Dominica. “I don’t even know where to begin to clean up,” said Jacey’s mother, Celine Fingall. “It makes no sense while the roof is off. You start to clean up now and the rain comes and soaks everything again.” On the heels of Hurricane Irma, a Category 5 storm that devastated the Caribbean region, Hurricane Maria – also Category 5 – took at least 38 lives in its path. It also increased the number of children in urgent need of humanitarian support, including an estimated 20,000 in Dominica alone. In Maria’s aftermath, UNICEF rapidly distributed emergency supplies in coordination with national authorities and partner agencies. UNICEF’s priorities in Dominica included providing safe drinking water to affected families, delivering psychosocial support to children and their families, and restoring education through the rehabilitation of schools and the establishment of child-friendly centres. UNICEF was engaged, as well, in post-crisis assessment and recovery operations in Dominica and other hurricane-damaged islands in the Eastern Caribbean.

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INTENSITY

Research also indicates that rapid increases in the intensity of hurricanes, which occurs when hurricane wind speeds rise by 25 knots in a 24-hour period, can be linked to the warming climate.

For example, a 2018 study found that rapid intensification of hurricanes in the Central and Eastern Atlantic increased between 1986 and 2015, likely due to a warming climate. The study also focused on the rapid intensification of Category 5 Hurricanes Irma and Maria in 2017, which devastated parts of the Caribbean, including Antigua and Barbuda, Cuba, Dominica, the Dominican Republic and Puerto Rico. The study found higher probabilities of rapid intensification in the Gulf of Mexico and the Caribbean than in the Central or Eastern Atlantic.

PRECIPITATION

Not only are hurricanes in the Caribbean becoming stronger, they are also causing more precipitation and flooding, which can be particularly devastating for SIDS.

Research conducted in 2018 concluded that supercharged hurricanes linked to the effects of climate change essentially “take heat” from the ocean, which results in heavy rainfall and a high risk of flooding. The warming of oceans, the research concluded, was caused by “human-induced climate change.”

In 2017, Hurricane Maria had the highest total averaged precipitation of any storm to hit Puerto Rico since 1956. A study of the rain from the hurricane warned that extreme precipitation would likely continue because of “long-term trends in atmospheric and sea surface temperature.”

There is also evidence that climate change is causing atmospheric circulation in tropical regions to slow in the
summer, which causes hurricanes to move more slowly, potentially creating more precipitation, flooding and damage as they stall over land. Meanwhile, new data from the Massachusetts Institute of Technology indicate that more storms rapidly intensifying before they make landfall are likely. Coupled with higher sea levels (also linked to climate change), this intensification could be devastating for affected areas.

VULNERABILITIES

The island geography of the Caribbean makes the region especially vulnerable to extreme weather events, including hurricanes. Because the Caribbean SIDS are relatively small, one hurricane has the potential to impact the entire area and the complete population of any particular island. In addition, people living in low elevation coastal zones are generally at extreme risk from storm surges and rising sea levels.

The Caribbean SIDS also face economic vulnerabilities as they prepare for and respond to increasingly intense weather events. Typically, Caribbean SIDS have undiversified economies that rely heavily on tourism. A significant proportion of families in the region also suffer from economic marginalization and do not have the means to ‘hurricane-proof’ their homes or invest in other preparedness and resiliency measures. Around 21 per cent of the population in the Caribbean lives below the poverty line. Youth unemployment ranges from 18 per cent to 47 per cent. Therefore, when a Category 4 or 5 hurricane makes landfall on an economically vulnerable island, many families are unprepared and the government may not have the capacity to adequately respond.

Hurricane Maria, for example, caused an estimated US$930.9 million in damages to Dominica in 2017, which, when combined with US$380.3 million in losses, equals about 226 per cent of the island’s 2016 GDP. Hurricane Irma caused damages of US$155 million and losses of US$2.6 billion in Antigua, Barbuda and the British Virgin Islands. The tourism, agriculture and housing sectors were significantly affected in all of these islands. In the British Virgin Islands, damages and losses in the tourism sector alone were estimated to be US$1.2 billion.

In the aftermath of Hurricane Dorian in 2019, United Nations Secretary-General Antonio Guterres described how the destruction in the Bahamas exasperated layers of vulnerability.

“First, the worst impact is on countries with the lowest greenhouse emissions; the Bahamas are a very good example of that,” Guterres said, during a visit to the island after Hurricane Dorian. “Second, it is the poorest and most vulnerable people in those countries who suffer most, and again, the same has happened with the communities in the Bahamas. And third, repeated storms trap countries in a cycle of disaster and debt.”

HISTORIC HURRICANE SEASONS

The Caribbean SIDS have been particularly hard hit by devastating hurricanes. However, the 2017 hurricane season stands out as historic in terms of storm strength and damage. The season had 10 hurricanes, six of which developed into Category 3 storms or higher. According to the U.S. Global Change Research Program’s Fourth National Climate Assessment, in 2017, Anguilla, Antigua and Barbuda, British Virgin Islands, Cuba, Dominica, Guadeloupe, Puerto Rico, Saint Kitts and Nevis, Saint Martin, Sint Maarten, the Turks and Caicos, and the United States Virgin Islands were all affected by Category 4 and 5 hurricanes with winds of 130 miles per hour or higher. The hurricanes displaced more than 400,000 children and disrupted essential services for thousands more.

On 1 September 2019, Hurricane Dorian, a Category 5 storm with maximum sustained windspeeds of 185 miles per hour, made landfall in the Bahamas, it was the strongest known hurricane to have impacted the island nation in its recorded history. Dorian devastated the island of Abaco, leaving much of it uninhabitable, and it trampled parts of Grand Bahama. The storm led to 69 confirmed casualties and destroyed 45 per cent of homes.

The storm and its aftermath were “a demonstration of how dramatic natural disasters are becoming, increasing in intensity and in frequency and how vulnerable countries like the Bahamas are in relation to these natural disasters,” United Nations Secretary-General Guterres said during his visit after Hurricane Dorian.
Hurricanes and forced displacement

The International Organization for Migration defines environmental migrants as “persons or groups of persons who, for compelling reasons of sudden or progressive changes in the environment that adversely affect their lives or living conditions, are obliged to leave their habitual homes, or choose to do so, either temporarily or permanently, and who move either within their country or abroad.”

Increased migration – or forced displacement – will continue to be driven by the effects of climate change, including extreme weather events like strong hurricanes. Without development efforts to stem the effects of climate change on children and families, the scale of forced displacement will “ramp up” by 2050 and then accelerate, according to the World Bank Group.

As disasters occur more frequently and become more dangerous, “some local areas will become increasingly marginal as places to live or in which to maintain livelihoods,” according to the United Nations Intergovernmental Panel on Climate Change (IPCC). And when that happens, forced displacement may become permanent relocation, particularly on atolls (rings of coral islands), adding pressures to the communities where people seek refuge. The IPCC finds an increased risk of forced displacement for some populations, including people in rural and urban areas with higher exposure to extreme weather events; low-income developing countries; and communities without the resources to plan for displacement.

ABOVE: In September 2017, a child stands outside her family’s home, which was severely damaged by Hurricane Irma, in the Blue Hills settlement of Providenciales, Turks and Caicos Islands. The Category 5 storm endangered the well-being of hundreds of thousands of children in the Caribbean with its high winds, heavy rain and storm surges.
ABOVE: Antown Beazer, 11, looks at pants piled high on a table in front of him at the Multipurpose Centre in St. John’s, the capital of Antigua, in September 2017. The pants were among the many clothes and other items donated by the public for children like Antown and their family members displaced from Barbuda by Hurricane Irma. “My mom took care of us during the storm,” said Antown. “It was bad, and we were hiding in the bedroom. I was very scared.” Irma was the strongest hurricane ever recorded in the Atlantic when it struck. The Category 5 storm pummelled islands in the Eastern Caribbean, leaving a path of destruction – especially in Anguilla, Barbuda, the British Virgin Islands and the Turks and Caicos Islands. More than 90 per cent of the buildings in Barbuda were destroyed, and much of its infrastructure was either destroyed or badly damaged. Officials quickly evacuated the vast majority of the population to Antigua, Barbuda’s sister island, ahead of another approaching hurricane. Pre-positioned UNICEF supplies in Barbados and Antigua – including tents, water purification tablets and hygiene kits for displaced families – were distributed rapidly in coordination with national authorities.

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Indeed, a significant number of people are already being displaced annually by weather-related disasters. Of the 28.1 million people newly displaced internally around the world in 2018, 16.1 million – nearly 60 per cent – were forced from home by weather-related events. This figure included 7.9 million people displaced by hurricanes, typhoons and cyclones.

In 2017, more than 18 million people were newly displaced by weather-related events around the world. Hurricane Irma in the Caribbean was the year’s largest disaster event worldwide, causing the displacement of more than 2 million people.

At the time, Hurricane Irma was the strongest hurricane on record in the Atlantic, with maximum sustained winds speeds of 185 miles per hour. The hurricane affected more than 15 countries and territories and displaced more than 1.7 million people in countries including Antigua and Barbuda, Cuba, the Dominican Republic and Haiti. Combined, Hurricanes Harvey (Category 4), Maria (Category 5) and Irma (Category 5) left more than 3 million people displaced in the Caribbean in under two months.

In 2019, Hurricane Dorian forced the evacuation of about 5,500 people including more than 1,400 children, to Nassau. Many more children and families fled to other islands or left the Bahamas. At the end of November 2019, there were still more than 500 people living in officially designated shelters. While some people have begun returning to affected communities in Abaco and Grand Bahama, many families have split – with some parents returning to rebuild while others remain in shelters with their children.

Looking ahead, forced displacement caused by extreme weather linked to climate warming is expected to increase in the coming years and decades. The rise in displacement is cause for extreme concern, since the top six countries and territories with the highest annual average of internal displacement are Caribbean SIDS.

As a result, the Caribbean SIDS population is increasingly at risk of forced displacement from more intense hurricanes linked to climate warming.

**IMPACT ON CHILDREN**

As noted, the devastation wrought by hurricanes can cause the displacement of thousands or even millions of children and families. This displacement can be relatively short term or last for longer periods as communities rebuild homes, roads, bridges, power networks, agriculture, schools, hospitals, and water and sanitation systems.

Children are particularly vulnerable during population displacements, especially if their parents are killed or they are separated from their families in the chaos of the event. Alone, children are at increased risk of violence, exploitation and trafficking. Displaced children are also at increased risk from opportunistic diseases such as measles and respiratory infections, which can thrive in overcrowded conditions in emergency shelters.

In addition, children under age 5 are particularly susceptible to diseases that arise when water supply and sewage treatment systems are damaged. Displaced children are also at risk of having limited or no access to the essential services they need to thrive including education, protection and health care.

Natural disasters also have devastating impacts on migrant children and families with irregular migration status – who often live in the most vulnerable conditions. When disasters strike, these children and families may not seek the support they need because they fear deportation.

Humanitarian assistance should always be offered to all those in need irrespective of their migration status. This assistance should be separated by a “firewall” from migration control procedures. Even in humanitarian contexts, migrant children and their families should never be deported without a thorough evaluation to ensure that a possible return to their country of origin or a third country is in the best interest of each child.
UNICEF in action

When disaster strikes, UNICEF works with partners throughout the Caribbean to protect and support children. With climate change mitigation, development policies and resilience planning, UNICEF focuses on children and works to establish disaster-risk reduction strategies that limit forced displacement and shorten rehabilitation time – so families can return home.

For example:

- In the wake of Hurricane Matthew in Haiti, UNICEF provided life-saving support and long-term care to affected and displaced children and families. We worked with partners to rehabilitate public services, including health, education and child protection. We continue to work to adapt and protect public services in preparation for possible future disasters.

- In Guyana and Suriname, UNICEF works in areas affected by climate change to provide support to local communities – including refugees from the Venezuelan crisis – by increasing access to water sources and improving sanitation and hygiene. We are also working on integrating climate change and environmental education and natural resource management into formal and non-formal education curricula.

BELOW: A child emerges from bathing in Loubiere, near Roseau, the capital of Dominica, during the immediate aftermath of Hurricane Maria in September 2017.
In the aftermath of Hurricanes Irma and Maria in Cuba and Haiti, UNICEF and partners reached more than 400,000 people with access to drinking water and water purification tablets. About 21,000 children and adolescents continued their education as schools were reconstructed and temporary centres were set up. In addition, 1,800 children under age 5 had access to safe learning environments. In Cuba, about 24,000 students received educational materials at school.

After the hurricanes, UNICEF and partners launched a cash transfer system that benefited more than 4,600 of the most vulnerable families. Since then, UNICEF has been working to return the affected areas to normal, prioritizing water, sanitation and infrastructure reconstruction. UNICEF continues to prepare for more hurricanes with the aim of minimizing potential damage in the most vulnerable areas.

In the Dominican Republic, UNICEF is running a pilot project on social support to protect communities from climate shocks. Following the pilot stage, the programme will be expanded into a national framework that will support communities across the country. UNICEF in the Dominican Republic also provides psychosocial support to children and families affected by humanitarian crises. UNICEF plans to work with the Government of the Dominican Republic, through the social protection system, on risk reduction strategies and humanitarian assistance programmes that guarantee the rights of children and adolescents in times of extreme weather events.

In Belize, UNICEF works with children and young people to empower them to become agents of change. The work includes a new air pollution pilot programme that aims to reduce emissions and create a greater awareness about ways to protect the environment.

Throughout the Caribbean, UNICEF works with governments to advocate for policies that mitigate climate change and its effects; invest in data and research; track disease and increase vaccine coverage; and promote cash transfers, public work schemes and other social protection safety nets.
ABOVE: The concrete foundation and a small section of flooring are all that remain of the Cephas family’s home in Codrington, the capital of Barbuda, as seen in November 2019. More than two years earlier, in early September 2017, the family was evacuated from Barbuda to its sister island, Antigua, during Hurricane Irma – a massively destructive Category 5 storm. Gloria Cephas, mother of eight children ranging in age from 7 to 27, recalled that a friend took the family in for their first night in Antigua. Through another friend, they were able to locate an apartment to rent. Gloria and her children have moved three more times since, staying for a time in a hotel that served as a temporary shelter for Barbudans displaced by the hurricane. The shelter closed in April 2019, leaving Gloria with no choice but to rent a house for the equivalent of more than US$520 per month. Today, she lives from paycheck to paycheck. Gloria said she and the children would move back to Barbuda if only they had a house to which they could return.
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Climate change

The worst impacts of climate change are not inevitable. But to mitigate the risk and impact of extreme weather events caused by climate change from uprooting children, UNICEF calls on governments to take action in four key areas:

1. **Put children at the heart of climate change strategies and response plans.**
   Children and their rights should be recognized as part of governments’ and businesses’ climate change strategies and plans. Water, health and education must be made more resilient as children are particularly vulnerable to the diseases and environmental stresses that are worsened by a shifting climate.

   As those who have contributed the least to climate change and yet will suffer its effects the most and for the longest, children should receive the strongest protections from its effects. Protecting children requires a holistic approach whereby departments or ministries of environment work together with other actors across public, private and civil society sectors to create partnerships, institutional arrangements and climate finance.

2. **Recognize children as agents of change.**
   Children and young people have already taken the lead on advocating for better policies to mitigate climate change and its effects; it is time for us all to join them. To do this, we must listen to their perspectives on environmental issues and work with them to identify solutions. With their passion for this issue, we must see them as actors who can build community capacity for disaster risk reduction and promote environmentally sustainable lifestyles.

3. **Protect children from the impact of climate change and environmental degradation.**
   As with every disaster, children from the poorest communities are the hardest hit by extreme weather events and other effects of climate change. When a disaster hits, families from the poorest households are the most likely to be displaced for the longest time and with the least access to vital financial and social resources. Without action to reduce inequity, the depths of poverty and deprivation worsen. Reducing these inequities – providing the poorest children with access to good nutrition, food security, strong and accessible health systems, functioning child and social protection systems, and safe water and sanitation – will create a stronger foundation so that the most vulnerable children can better cope with climate change now and in the future. We need to increase finance and implement adaptation and climate resilience measures for the services that children depend on most.

4. **Reduce emissions and pollution.**
   We need ambitious commitments and actions from governments and businesses to reduce global emissions and pollution to levels that avoid the worst impacts of climate change. Cutting emissions requires low carbon development, a robust legal framework and more sustainable energy solutions such as solar, wind and hydro. Investment in sustainable practices across agriculture, forestry, and the livestock and fishery industries will help mitigate climate change and support adaptation to its effects.
ABOVE: Tiquanisha Lewis, 5, pushes her sister Tiquania, 2, on a swing tied to a tree outside their home in South Hill District on the Caribbean island of Anguilla, which was hard hit by Hurricane Irma. The children play near fallen trees, a destroyed structure and other debris. Tiquanisha, Tiquania and the rest of their family were at home and awake when the Category 5 storm hit around 2 a.m. on 6 September 2017. The parents – who had rebuilt their house with concrete after Hurricane Luis devastated Anguilla more than 20 years ago – ventured outside the next morning and saw the extent of the damage: palm trees uprooted, corrugated-iron roofs torn off homes, and debris and rubble everywhere. “The kids have seen everything turned upside down,” said their mother. “ Somehow, the swing was pretty much the only thing left standing.” Following the hurricane, UNICEF accelerated its efforts to help children in affected areas cope with their experiences. Together with local authorities and partner organizations, UNICEF worked to provide children with access to psychosocial support services, as well as safe spaces in which to play and participate in activities such as art therapy.

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Children uprooted

Around the world, millions of children and families flee their homes to escape disaster, conflict, persecution and poverty. Many of these children face danger, detention, deprivation and discrimination. World leaders must stand up for them.

UNICEF calls for six actions to protect all refugee and migrant children:

1. **Press for action on the causes that uproot children from their homes.**
   Disasters, protracted conflicts, persistent violence, and extreme poverty and disadvantage drive millions of children from their homes. UNICEF calls for greater efforts to protect children from conflict and to address the root causes of violence and poverty. Such efforts should include increasing access to education; strengthening health and child protection systems, and social safety nets; expanding opportunities for family income and youth employment; and facilitating peaceful conflict resolution and tolerance.

2. **Help uprooted children stay in school and stay healthy.**
   Many refugee and migrant children miss out on an education – and many lack access to health care and other essential services. UNICEF calls for increased collective efforts by governments, communities and the private sector to provide uprooted children with access to education, health services, shelter, nutrition, water and sanitation. A child’s migration status should never be a barrier to accessing basic services.

3. **Keep families together and give children legal status.**
   Children who are travelling alone or have been separated from their families are more easily preyed upon, and more vulnerable to violence and abuse, than those who are accompanied by parents or guardians. UNICEF calls for stronger policies to prevent the separation of children from their parents and other family members in transit and faster procedures to reunite children with their families, including in destination countries. All children need a legal identity and should be registered at birth.

4. **End the detention of refugee and migrant children by creating practical alternatives.**
   Detention is harmful to children’s health and well-being and can undermine their development. UNICEF calls for practical alternatives to detention for all children. Unaccompanied and separated children should be placed in foster care, supervised independent living or other family- or community-based living arrangements. Children should not be detained in adult facilities.

5. **Combat xenophobia and discrimination.**
   Uprooted children are often victimized by discrimination, xenophobia and stigma – both during their journeys and at their final destinations. We all have a part to play in welcoming uprooted children into our cities and communities. UNICEF calls on local leaders, religious groups, non-governmental organizations, the media and the private sector to combat xenophobia and nurture a greater understanding among uprooted children, families and host communities. Governments should also set up stronger measures to combat discrimination and marginalization in countries of transit and destination.

6. **Protect uprooted children from exploitation and violence.**
   Refugee and migrant children are extremely vulnerable to violence and abuse, and to being preyed upon by smugglers and even enslaved by traffickers. UNICEF calls for more safe and legal channels for children to migrate and seek refuge. Cracking down on trafficking, strengthening child protection systems and expanding access to information and assistance can help keep children safe. Children and families should never be returned to face persecution or life-threatening danger in their countries of origin.
Child Alert is a briefing series that presents the core challenges for children in a given crisis location at a given time. This issue examines the impact of a changing climate on the rights and well-being of children in the small island developing states of the Caribbean region.