

= Effects of Hurricane Georges in Cuba =

The effects of Hurricane Georges in Cuba included \$ 305 @. @ 8 million in damages and six deaths . Forming out of a tropical wave over the Atlantic Ocean , Georges attained a peak intensity of 155 mph (250 km / h) on September 20 , 1998 . On September 23 , the storm made landfall in southeastern Cuba as a minimal Category 1 hurricane . The storm tracked over the country for the following two days before emerging into the Gulf of Mexico on September 25 and later making landfall in the United States as a Category 2 hurricane . Before the storm 's landfall in Cuba , officials reported that 200 @, @ 000 people were evacuated to shelters ; however , later reports indicated that upwards 711 @, @ 000 people evacuated . A state of emergency was declared for much of eastern Cuba and most of the country was placed under a tropical storm or hurricane warning during the storm 's passage .

More than 3 @, @ 000 homes were destroyed and 60 @, @ 000 damaged throughout the country , leaving an estimated 100 @, @ 000 people homeless . Agricultural losses were severe , with the plantain crop loss estimated at 70 % of annual production due to Georges , accounting for roughly \$ 15 million of the total damages . Following the passage of the hurricane , several countries provided relief funds to Cuba for disaster recovery . Despite crop losses , affected residents were given essential supplies by the local government . By December , an estimated \$ 90 million in funds was allocated for the impacts of Georges and the drought that preceded it .

= = Background = =

Hurricane Georges began as a tropical wave off the coast of Africa in mid @- @ September , 1998 . Tracking towards the west , the wave spawned an area of low pressure two days later which quickly strengthened into a tropical depression . On September 16 , the depression was upgraded to Tropical Storm Georges and further to Hurricane Georges the next day . The storm reached its peak intensity on September 20 with winds of 155 mph (250 km / h) , just below Category 5 status on the Saffir @- @ Simpson Hurricane Scale . Over the following five days , the hurricane tracked through the Greater Antilles , causing over 600 fatalities , mainly in the Dominican Republic and Haiti .

Late on September 23 , Georges made landfall about 30 mi (48 km) south of Guantanamo Bay . Hurricane Georges maintained minimal Category 1 status for the following two days as it tracked over the northern coastline of Cuba . On September 25 , Georges entered the Gulf of Mexico . The storm made landfall three days later near Biloxi , Mississippi with winds of 105 mph (165 km / h) . Shortly after landfall , the hurricane significantly slowed , with forward motion reducing to a general drift towards the east . Georges dissipated on October 1 near the Atlantic coast of Florida .

= = Preparations = =

At 1900 UTC on September 21 , the National Hurricane Center issued a hurricane watch for eastern Cuba for areas between the provinces of Las Tunas and Guantánamo . The following day , the watch was extended northward to Sancti Spíritus Province . Areas south of Las Tunas were also placed under a hurricane warning at this time . By 0900 UTC on September 23 , all areas previously under a hurricane watch were under hurricane warnings . The watch was further extended to Cienfuegos Province as Georges tracked through southern Cuba . Areas south of Sancti Spíritus Province were also placed under a hurricane warning . By September 25 , all hurricane warnings were discontinued in the country and all watches were discontinued the following day .

On September 22 , much of eastern Cuba was placed under storm alert by President Fidel Castro . Authorities worked quickly to clean storm drains , trim trees , and move residents to safety , including 30 @, @ 000 children in the mountains who were picking coffee . On September 23 , authorities in Cuba evacuated 200 @, @ 000 residents from coastal areas as Georges neared landfall . The Cuban Red Cross reported that nearly 500 @, @ 000 people were evacuated , of which 200 @, @ 000 were placed in shelters . Later reports stated that about 711 @, @ 000 people

were evacuated from dangerous areas . Flights in and out of the county were cancelled and schools were closed due to the storm . In addition to the evacuation of residents , more than 90 @, @ 000 head of cattle were relocated to higher ground .

In Guantánamo Province , 240 refugees from Haiti and 3 @, @ 000 residents from the town of Maisí were evacuated . An additional 2 @, @ 500 people were evacuated from Baracoa . In all , 50 @, @ 000 people were evacuated from the region . An estimated 140 @, @ 000 people were evacuated from Holguín Province as well as 8 @, @ 000 heads of cattle . In Santiago de Cuba Province , 12 @, @ 400 people were evacuated and relief crews were being staged at several shelters set up throughout the province . Another 1 @, @ 000 residents were evacuated from Ciego de Ávila Province and 17 @, @ 000 students were relocated from Sancti Spíritus Province . Construction crews worked quickly to secure dilapidated homes in Baracoa and evacuated tourists from the region . Tourists were sheltered in numerous hotels and hospitals and were warned for unknown reasons not to take pictures of the damage once the storm had passed .

Much of eastern Cuba , already under storm alert , was placed under a State of Emergency due to the threat of Georges . President Castro emphasized the severity of the hurricane during a two @-@ hour address to the nation on September 23 . He explained , in great detail , civil preparation maps and impacts from past hurricanes . His last note was that he would refuse any aid from the United States as they (Cuba) would not accept aid from a country that has an embargo on them .

= = Impact = =

Throughout Cuba , Hurricane Georges produced torrential rainfall , peaking at 24 @. @ 41 inches (620 mm) in Limonar in the province of Guantánamo . Several other locations reported over a foot (300 mm) of precipitation as well . Storm surge of 4 ? 6 feet (1 ? 2 m) was expected along the eastern coastline , along with dangerous waves on top of the surge . Though winds were reduced by the time Georges hit Cuba , it still retained winds of 75 mph (120 km / h) , along with stronger gusts in squalls . Waves exceeding 16 ft (4 @. @ 8 m) impacted coastal regions of the county , with some areas reporting that waves were topping the sea wall .

The first community to lose power was in Maisí located within Guantánamo Province . Heavy rains from the outer bands of Hurricane Georges triggered flooding in the region as more than 10 in (254 mm) of rain fell by September 24 . Sustained winds in the hurricane reached 75 mph (120 km / h) with higher gusts as the storm tracked over eastern Cuba . By 9 pm on September 24 , the eye of Georges passed over Baracoa . In Guantánamo , four rivers overflowed their banks and flooded the provincial capital ; however , power lines were downed throughout the region and contact to officials in the area was impossible .

The hurricane 's heavy rainfall resulted in mudslides along the mountainous terrain . This , combined with strong winds , damaged 60 @, @ 475 homes , of which 3 @, @ 481 were completely destroyed . Along with other affected nations in the Caribbean , more than 100 @, @ 000 were left homeless due to Hurricane Georges . A total of 1 @, @ 117 businesses were also damaged , of which 12 were destroyed . High winds downed power lines , trees , and telephone poles , leaving many in eastern Cuba without electricity in the aftermath of the storm . Along the coast , severe flooding washed out railroad and highway bridges . Though eastern Cuba was the area most affected , the central and western portion of the island , including Havana , experienced torrential rains and strong wind gusts . There , strong waves broke over the seawall , and caused heavy flood damage to some of the town 's old buildings .

As in Puerto Rico and Hispaniola , the severe drought during the El Niño of 1997 exacerbated the flood 's disruption to crops in eastern Cuba . The heavy rainfall from Georges damaged the crops greatly , despite the effort to harvest them prior to its arrival . Up to 70 % of the plantain crop , a chief food in the country 's diet , was destroyed . The sugarcane crop fared badly as well , limiting one of the country 's important export crops . The coffee and cocoa plantations also suffered from the hurricane , further damaging the country 's food supply . A total of 15 @, @ 758 hectares of croplands as well as 36 @, @ 040 tons of fruit were destroyed by Hurricane Georges . Agricultural losses from the storm were estimated at \$ 15 million .

Well @-@ executed evacuations and warnings limited the death toll to six , while damage amounted to \$ 305 @.@ 8 million (1998 USD , \$ 409 @.@ 8 million 2009 USD) . In addition to the six human lives lost , 497 heads of cattle and 21 @,@ 387 chickens were killed . All six human deaths were indirectly related to Georges ; the first death occurred when an 61 @-@ year @-@ old woman stepped on a downed wire and was electrocuted ; the second occurred when a 56 @-@ year @-@ old man drove over another downed wire on his motorcycle and was electrocuted .

= = Aftermath = =

On September 25 , the government of Spain approved \$ 1 @.@ 07 million in food assistance for Cuba . On September 29 , the government of Japan sent water equipment , soap , towels , and emergency health kits worth \$ 119 @,@ 200 to the affected areas in Cuba . By February 1999 , the Japanese Government had provided Cuba with nearly \$ 1 million in disaster funds . An emergency cash grant of \$ 50 @,@ 000 was also given to Cuba by the United Nations . The Cuban Red Cross mobilized about 8 @,@ 700 volunteers to assist victims of the storm in the 900 shelters set up throughout the island . Plastic sheeting was to be distributed for about a week for residents to patch holes in the roof of their homes . The National Council of Churches sent relief goods valued at \$ 70 @,@ 000 to the Cuban Government on October 9 . By February 1999 , the Cuban Red Cross distributed over 30 @,@ 000 sheets of roofing to nearly 5 @,@ 500 people in three provinces . Several months after the storm , the Cuban Government reported that they had allocated about \$ 38 million in funds for Hurricane Georges .

Already suffering from food shortages due to a five @-@ month drought , President Fidel Castro announced that the government would supply people under the age of 14 and those over 60 , which accounts for roughly 36 % of Cuba 's population , with extra food aid . An estimated 156 @,@ 000 tonnes of food was set aside for this action and the food was worth several million dollars . People who qualified for the aid would receive 4 @.@ 4 lbs (2 kg) of rice and peas if they lived in western Cuba and 6 @.@ 6 lbs (3 kg) if they lived in eastern Cuba per month until July 1999 . The United Nations World Food Program provided \$ 20 @.@ 5 million in aid for both the effects of the drought and Georges . By December , the Cuban Government requested \$ 90 million to help recover from the hurricane and drought . By this time , about \$ 40 million had already been set aside for the same reason . The Cuban Red Cross supplied shelter for more than 92 @,@ 000 residents and supplied them with hygiene kits , food , water , and other relief materials .

On December 18 , 1998 , the United Nations launched a large @-@ scale rehabilitation effort in Cuba . Roughly \$ 14 million was spent on housing and infrastructure reconstruction and repair ; this portion of the project consisted of reconstruction of homes , schools , businesses , hospitals , irrigation and the water system . Another \$ 1 @.@ 1 million was used to inform and protect residents against post @-@ storm diseases . The largest part of the effort involved jump @-@ starting agriculture and fisheries . Roughly \$ 50 @.@ 4 million was provided to reconstruct fishing vessels , purchase new tools and gear . By mid @-@ February 1999 , the Governments of Italy , Germany , Canada and the European Union provided \$ 1 million , \$ 714 @,@ 000 , \$ 50 @,@ 000 , and \$ 510 @,@ 200 in funds respectively . The Government of Israel also supplied agricultural tools . The Government of Norway provided \$ 29 @,@ 100 in water @-@ borne disease prevention funds . Through various agencies , the United Nations Office for the Coordination of Humanitarian Affairs provided Cuba with roughly \$ 86 million in disaster funding .