

# Response to Hurricane Irma: Cuba

## Situation Report No. 4. Office of the Resident Coordinator

( 11/09/ 2017)



This report is produced by the Office of the Resident Coordinator. It covers the period from 14:00 hrs. on September 09<sup>th</sup> to 12:00 hrs. on September 11<sup>th</sup>. The next report will be issued on or around 12/09.

## Highlights

- Less than a year after the impact of Hurricane Matthew, the largest hurricane reported in the Atlantic, punishes Cuba for more than 72 hours.
- Hurricane Irma struck the country from the morning of September 8 to Sunday afternoon with strong winds, rains and coastal flooding.
- More than two million people were evacuated in evacuation centers and in family houses. The loss of ten human lives has been reported in the territories of Havana, Matanzas, Camagüey and Ciego de Ávila.
- President Raúl Castro described as severe the damage, particularly in housing, electric system, agriculture and tourism.
- Cuba declared recovery phase for the provinces that were in the alarm phase. Local teams from less affected provinces, have joined forces to rehabilitate basic services for the population and the operation of the main state sectors of most affected provinces.
- Authorities of the United Nations, Argentina, Bolivia, Colombia, Costa Rica, China, Dominica, Ecuador, El Salvador, Spain, Mexico, Nicaragua, Panama, Uruguay, Russia, Venezuela and Vietnam have expressed their willingness to help Cuba in the recovery work.



Foto: Periódico Juventud Rebelde



Foto: Periódico Granma



Foto: Periódico Granma

\*Note: All the information in this report has been taken from Cuban official media (TV, radio, and press) and statements from Cuban authorities. Sources: Newspapers Periódicos Granma, Juventud Rebelde, Vanguardia, Invasor, Adelante, Periódico 26, Ahora, Sierra Maestra y Venceremos. Radio: Radio Habana Cuba, Radio Angulo, Radio Mambí; Press agencies: Prensa Latina (PL) y Agencia Cubana de Noticias (ACN); Web sites: Cubadebate. Supplementary data has been taken from the National Statistics Office website.

## Situation overview

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Up until yesterday, September 10, Hurricane Irma punished the country with strong winds, rain and coastal inundation for more than 72 hours, since the morning of September 8.

More than two million people (18% of the Cuban population) were evacuated to centers specifically authorized by local governments and to the homes of family or friends, in compliance with the guidelines of the Cuban Civil Defense General Staff. Despite authorities' prevention and preparedness efforts and guidance to the population, this powerful hurricane caused a loss of ten lives in Cuba, in Havana, Matanzas, Camagüey and Ciego de Ávila Provinces.

Thirteen of the 15 provinces were directly affected by the hurricane. Flooding is still being reported in coastal cities and northern communities today, including Havana, where water penetrated 500 meters beyond the line of its well-known Malecon. Coastal and mountain communities are also reported to be isolated due to the flooding of rivers and the destruction of roads.

Yesterday afternoon, the Cuban Civil Defense General Staff reported that all provinces that were under the Hurricane Alarm Phase (Santiago de Cuba, Isla de la Juventud and Pinar del Río) returned to the Hurricane Recovery Phase. Teams of the Revolutionary Armed Forces have joined efforts to collect debris and fallen trees and workers of the National Electric Union began their work to restore electricity services.

The United Nations showed their support for Cuba through a message from the Chief of Staff of the UN Secretary General, Maria Luiza Ribeiro Viotti, to the Cuban Ambassador to the UN, Anayansi Rodríguez Camejo.

The governments of Argentina, Bolivia, Colombia, Costa Rica, China, Dominica, Ecuador, El Salvador, Spain, Mexico, Nicaragua, Panama, Uruguay, Russia, Venezuela and Vietnam also expressed their solidarity and willingness to assist the country in recovery efforts.

## Humanitarian Response

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### National authorities

Cuban President Raúl Castro appealed to the people of Cuba to discuss recovery efforts after more than 72 hours of the destructive force of Hurricane Irma. The message, published today by the national press, ensures that no person or family will be left homeless nor abandoned.

The Cuban president described the severe damage caused by the largest and most intense hurricane that has formed in the Atlantic.

The Cuban Civil Defense decreed today the Hurricane Recovery Phase for 13 of 15 provinces, home to 10.1 million people, representing 89.87% of Cuba's population.

The Hurricane Recovery Phase includes provinces in all three regions of the country.

- **Recovery Phase:** Guantánamo, Granma, Holguin, Las Tunas, Camagüey, Ciego de Avila, Villa Clara, Santi Spiritus, Cienfuegos, Matanzas, Mayabeque, Havana and Artemisa Provinces.
- **Normal State:** Santiago de Cuba, Pinar del Río and Isla de la Juventud Provinces.

According to preliminary data, more than 2 million people were evacuated throughout the country. Evacuation plans included the entire population of coastal communities on the northern coast of the island, especially those in areas vulnerable to flooding and those with people living in areas bordering rivers or reservoirs, mountainous areas with landslides or dwellings that are highly deteriorated.

The Provincial Defense Council of Havana warned of the danger of coastal inundation along the coastal strip of the Cuban capital and the effect that the hurricane could have on the city's housing with a high degree of deterioration.

The 1,134 evacuation centers across the country were supported by 5,800 workers in the Health Sector. The Ministry of Education welcomed more than 50,000 people in 500 educational centers across the country.

Evacuation plans included more than 12,500 tourists.

The gradual return of the population to their homes is guided by the Provincial and Municipal Defense Councils and depends on the severity of the damage. A significant number of people remain evacuated because they cannot return or because the conditions they return to would be inhabitable.

Available data on evacuated populations by territories is as follows:

Provinces	Evacuated people
Guantánamo	136,700
Santiago de Cuba	145,000
Granma	66,200
Holguín	12,800
Las Tunas	150,00
Camagüey	140,000
Ciego de Ávila	102,374
Sancti Spíritus	10,000
Villa Clara	200,036
Cienfuegos	22,700
Matanzas	62,750
Mayabeque	17,000
La Habana	78.960
Artemisa	22,123

Source: Data information published in national and local media

The President of Cuba and President of the National Defense Council both sent instructions to the Heads of Strategic Regions, Presidents of Provincial Defense Councils, the Chief of the National Civil Defense and General Staff to ensure a strong response to the impact of Hurricane Irma on the electrical infrastructure throughout nearly the entire country.

## Sectors



### Water, Sanitation and Hygiene

#### Damage:

- Coastal inundation, damage to sanitation facilities, and the flooding of streams and rivers have caused the contamination of cisterns throughout the northern coast of affected municipalities.
- In Havana, power outages continue to affect water pumping and supply.

#### Response:

- Intensive recovery efforts are underway by Cuban Civil Defense Brigades, with the support of the population, to remove fallen trees, clean sewers and drainage systems, and collect solid waste.

- To ensure the water supply, generators are being used to avoid any kind of disruption and to respond to power outages.

#### UNICEF

- UNICEF is coordinating the purchase of 3 million chlorine tablets to ensure a safe, potable water supply.
- Proposals are also being developed to ensure the acquisition of 10-liter tanks to store water, purchase of hygiene kits, and distribute of communication materials on sanitation and hygiene best practices.

#### PAHO/WHO

- PAHO/WHO is estimating needs in terms of the quantity of analysis kits required to ensure water quality.



### Food Safety and Nutrition

#### Response/Preparatory measures:

##### Damage:

- Damage is reported in all agricultural production facilities, including food harvesting and distribution centers. The most affected crops are plantains, rice and sugarcane.
- The most critical damage was registered in the Camaguey, Ciego de Avila, Sancti Spiritus and Villa Clara Provinces. According to estimates, around 9,000 hectares of plantains were lost in these territories, in addition to Holguin and Las Tunas Provinces. Damage was also reported to crops such as maize, vegetables, tubers and fruits.
- In terms of livestock production, pork and poultry were most affected.
- It is also estimated that there is damage to the fishery sector along the whole northern coastline and losses were reported in the aquaculture sector (in particular nearly 800,000 stocks in Sancti Spiritus Province).
- Severe damage was reported in the sugar sector, although the damage is still being quantified. About 300,000 hectares of coffee were affected to various extents. Some crops are devastated, as well as soils already furrowed for sowing. Nearly 40% of the country's sugar mills are exhibiting structural damages and 4,000 tons of sugar have been inundated.
- Agroindustries are also estimated to be affected, such as the fertilizer factory in Camaguey Province, with damage, affecting the coming season

##### Measures to guarantee access to food and protect crops, production and agricultural inputs:

- The Ministry of Agriculture stated that drainage of the flooded fields has begun. Assistance is being given in the form of firewood and coal to 441 collective food production centers in the most severely affected areas. In addition, organic material has been gathered to protect short-cycle crops, recover vegetable gardens and organic gardens (organoponicos) associated with the urban agriculture programme, and guarantee the harvest of mature coffee as well as coffee grains razed to the ground.
- The production of milk, eggs and meat has been reorganized and instructions have been issued for the replenishment of the affected numbers of poultry and pigs.
- To guarantee the recovery of different segments of the agricultural sector, 500 trucks and tens of gathering machines have been made available.

##### FAO:

- FAO is closely observing the developments in order to stay up-to-date with the needs of national counterparts and to be able to provide a rapid and efficient response for the rehabilitation of food production in the most affected sectors.
- Direct communications with sectoral authorities are maintained in order to be able to determine the necessities as soon as possible
- Regional and central offices are prepared for assistance. Personnel are being mobilized to support the coordination of assistance.

##### WFP:

- WFP has a contingency stock of 1,600 tons of food pre-positioned in Havana, Cienfuegos and Santiago de Cuba Provinces to support immediate assistance to around 275,000 people for one month in areas affected by Hurricane Irma.

- Possible response scenarios are being assessed to define the assistance of WFP, together with the Government, in relation to food rations, prioritized population groups and times, prioritizing the most affected areas.
- WFP is in constant contact with its headquarters and regional bureau to ensure timely assistance according to national needs. Financial and human resources are being mobilized.



## Infrastructures and Basic Services Rehabilitation

### Damages: Preliminary Data

#### Household

The country's president mentioned housing among the three most affected sectors in a first assessment of the negative impact of Hurricane Irma in Cuba.

Due to the large extension of the affected areas, it has not been possible to quantify the damages in housing and data are not yet available in most of the provinces impacted by the hurricane. At the moment only the first estimates of damage are known in:

province	Household	roof	municipalities
Holguín	4,006 houses affected (174 has been collapsed)		Gibara, Antilla, Holguín y Banes
Camagüey	3,000 houses damaged		Esmeralda y Nuevitas
Las Tunas	800 affected (46 has been collapsed and 114 parcialy damaged)	75 techos perdidos completamente y 585 solo de forma parcial	

#### Havana

- Significant damage to the housing fund is assessed, mainly due to extensive sea penetration and strong winds. Total and partial landslides have occurred, but definitive data are not yet available.

#### Matanzas, Villa clara, Sancti Spiritus, Ciego de Avila

- It assesses the situation of thousands of homes that lost their roofs and others that suffered total or partial landslides, these being among the provinces most affected, practically throughout the territory, due to the high number of hours that these territories were under their impacts

#### Guantánamo

- Affected housing in almost all municipalities, mainly in Palma Clara, Yumurí, Baracoa, Yateras, Yateritas, San Antonio del Sur, and Manuel Tames.

### ELECTRICITY:

#### Havana

- Very deteriorated structure of the electrical system.

#### Matanzas

- Severe damage to the Antonio Guiteras thermoelectric plant of 280 mega watts of power, due to the total collapse of the seawater house, where the pumps of the plant's cooling system are located. The largest generation unit in the country, it delivers approximately 20 percent of the energy.
- Damaged 550 km of power lines in the province.

### VIALES

#### Ciego de Avila

- The Cayo Coco Pedraplén suffered damage on six of its 12 bridges.

#### Mayabeque

- In Santa Cruz del Norte, 3 kilometers of the Via Blanca are obstructed.

### TOURISM

- Varadero: damage to hotel infrastructure mainly in glassware, light marquetry, false ceilings and ceilings.
- Cayo Santamaria and Cayo Coco. Even the important affectations are quantified. Important effects on the infrastructure of Cayo Coco airport

## COMMUNICATIONS

- The Ministry of Communications preliminarily detected more than 86,000 affections in the fixed basic telephony and more than 3,000 in the public telephony of the whole country.

### Havana

- More than 26 thousand fixed telephones and service 229 public stations out of service.
- Affected 63 television services, including 16 digital television. As well as, 21 radio frequency modulated services, and 18 medium wave services.
- Demolished of 12 towers: 11 of radio and one of television.
- At present, there are 1,257 amateur radio operators: 40 in provincial service centers, 180 in municipal management centers and 101 in interest objectives, among others.

## UNDP

- The Housing and Early Recovery Sector, led by UNDP with the participation of IOM, UN Habitat and UNESCO, continues to prepare information on basic means necessary for immediate response, including: roofing sheets, mattresses, kitchen kits, sheets, roofs and tools. These actions will be coordinated with those of the United Nations agencies that work in the water and sanitation, food security and health sectors.
- It is estimated that the greatest impact in the Housing and Basic Services Sector at the community level will be concentrated in the 25 municipalities in the north of the island, from the Camagüey Province in the Eastern Region to Villa Clara Province in the Central Region.
- The severity of damage in the housing sector is in the process of being quantified, as access roads are still being cleared and vital infrastructure is being restored. However, in these municipalities, it is possible to estimate the damage to population centers considering their vulnerability.
- The area is dominated by light-roof constructions (cement, metal and ceramic tiles with light structures) and a high percentage of construction is with wooden walls. Prior to Hurricane Irma, it was estimated that 50% of the buildings were in a technical state from regular to poor. Taking into account these indicators, the effects of total and partial landslides of houses and the total and partial impacts of roofs could be approximately 181,000 in the 25 most affected municipalities.
- The 9,823 roofing ceilings, pre-positioned by UNDP, are being gradually distributed according to the indications of the national authorities. These tarpaulins will create temporary facilities for affected populations.
- The UNDP Office in Havana is in an evacuation area due to its proximity to the sea, which is now in the recovery phase. Meetings are being held at PAHO as an alternative location identified for UNCT, UNETE team and SITREP.
- UNDP has activated its emergency response mechanism. Two UNDP experts will travel to the country on Monday to support the UNDP Office in their response. UNDP has activated its response system and made available \$500,000 for early recovery and \$100,000 for coordination in an initial response phase. These resources are in addition to those already made available from the reprogramming of the projects in implementation.

## OIM

- IOM is in constant communication with the Regional Emergency and Crisis Advisor for the Americas based in Panama and its Headquarters in Geneva. Efforts have been initiated to mobilize CERF funds through Headquarters and the regional office.



## Overview of health services in provinces likely to be affected:

General view of health services in the most affected provinces:

43 hospitals and polyclinics sheltered and providing coverage of essential health services for the population

Most affected Provinces/ Municipalities	Hosp.	Polyclinics	FDO	Mat. Homes	Elderly Homes	Grandp. Homes	Pop. 60 & +		Under age 5	
							M	F	M	F
Camaguey (Nuevitas, Minas, Sierra de Cubitas, Esmeralda)	13 (2)	31 (6)	657 (143)	7 (0)	14 (4)	24 (4)	72.869 (13.730)	79.429 (13.834)	21 713 (4.141)	20 335 (3.881)
Ciego Avila (Bolivia, Morón, Chambas)	3 (1)	19 (6)	392 (141)	10 (1)	8 (2)	16 (3)	39.025 (11.028)	41.651 (11.881)	12 523 (3.481)	11 743 (3.170)
S.Spiritus (Yaguajay)	8 (1)	23 (4)	448 (76)	5 (1)	8 (2)	9 (nd)	47.508 (6.533)	50.211 (6.509)	12.753 (1.314)	12 026 (1.211)
V.Clara (Caibarien, Camajuani, Encrucijada, Sagua, Quemado y Corralillo)	13 (3)	37 (11)	837 (250)	8 (1)	16 (5)	26 (5)	86.521 (25.874)	95.861 (27.929)	20 090 (5.810)	18 541 (5.310)

FDO: Family Doctor's Office

M: Male

F: Female

## Damages:

- The unfortunate loss of ten human lives has been reported so far in the territories of Havana, Matanzas, Camaguey and Ciego de Ávila.
- Nuevitas: The carpentry of the Hospital "Martin Chan Puga" suffered strongly from the blows of the winds.
- Gibara: Reported damages in the municipal hospital.
- Antilla: Damaged ceilings in the Grandparents' Home.
- Damages were reported on the cover of the Psychiatric Hospital of Placetos, Villa Clara, at the Provincial Vector Center in Ciego de Avila and the right-hand window wing of the Hospital Guillermo Domínguez of Las Tunas.
- Covers and windows in health facilities in Yaguajay, Sancti Spíritus and Maternal Home of Media Luna, Granma are also reported.
- Camaguey: So far, 12 health institutions have been damaged in the municipalities of Nuevitas, Esmeralda and the provincial capital, mainly in light covers, ceilings, glassware and windows.
- La Habana: Hospitals "Hermanos Ameijeiras" and "Camilo Cienfuegos" have different types of affectations, as well as several polyclinics and other health facilities located in the coastline zone of the capital.

## Response/Preparatory measures:

- The Ministry of Public Health ratified the availability of sodium hypochlorite with coverage greater than 18 days in the provinces and 10 days in the capital city. Measures were taken in the evacuation centers to ensure proper food handling and preparation to prevent any epidemiological risk.
- The MoH reiterated the existence of a special plan to guarantee health services to the Cuban population. 78 medical-surgical brigades still activated and around 7,300 health professionals are allocated at the evacuation centers. Necessary measures have been taken to prevent the appearance of infectious diseases. 11,000 bags of blood to cover 6 days in the most affected municipalities as well as 5 days of oxygen guaranteed.
- In the 1,134 shelter centers there are 5,800 health workers offering integrated care to the evacuees.
- Mayabeque: 755 generators were enabled, 58 of them are located in health centers to guarantee medical care.

## PAHO/WHO:

- PAHO / WHO is estimating in coordination with the health authorities the needs under different scenarios to guarantee the provision of essential life-saving health services to the population, the availability of safety drinking water in affected health facilities and other life-saving actions.
- UNDMT y UNETT worked today from Paho premises because UNDP offices were affected by the penetration of the sea. This situation should be normalized tomorrow.

**UNFPA**

- UNFPA is working in order to estimate the total of population affected and disaggregated by women in reproductive health, adolescents and pregnant women. In parallel, UNFPA has initiated the requesting of SRH kits and hygienic kits for targeted groups of population and for the health institutions in territories more affected by Hurricane Irma.

**Education****Damages:**

- Education Minister Ena Elsa Velázquez Cobiella explained that the extent of the damage to educational facilities has not yet been quantified. To date, 132 schools show damage to roofs and carpentry.

**Response/Preparatory measures:**

- The Minister of Education indicated that classes will resume gradually in each province, as recovery progress is made.
- Extensive sanitation work is carried out in all schools across the country. Special attention will be given to schools that were established as evacuation centers, which require major cleaning.

La Habana

- Four hundred educational facilities are being reviewed in order to resume classes on Tuesday, if conditions allow.

Granma

- School will resume on Tuesday in the 1,059 schools across the province. Although electricity disruption continues, classes will reopen tomorrow and staff (both teachers and directors) will need to guarantee access to quality education, even if the use of televisions or computers is not possible.

Camagüey

- Several educational centers were affected, especially roofs, carpentry and waterproofing, which caused leaks and some structural damage. In the municipality of Esmeralda, 30 schools have been affected.
- One of the priorities is to resume school as soon as possible and find alternative solutions for the 14,400 people who are in evacuation centers, especially those hosted in educational institutions.

Las Tunas

- School will resume on Tuesday while efforts are underway to repair the 54 educational facilities that were damaged. Efforts are also gear towards rehabilitating the 47 schools that served as evacuation centers before and during the hurricane to nearly 20,000 people out of the total 161,000 hosted in centers.

Holguin

- Damage has been reported to 982 government institutions, including schools.

**UNICEF**

- Once damages are quantified, UNICEF will support the timely return of children and adolescents to safe and secure learning spaces in the most affected municipalities. As part of its response, UNICEF foresees the distribution of Early Childhood Development (ECD) kits, School-in-a-Box kits and recreational kits as well as early childhood interventions.

**UNESCO**

- UNESCO is working to identify possible damage to schools in the affected municipalities to support the rehabilitation of educational centers and guarantee safe learning spaces.
- UNESCO will assess the extent of the damage to develop pedagogical strategies in order to overcome post-disaster stress in students and teachers.

**Logistics****Damage:**

- According to estimates, strong winds and coastal inundation affected the most impacted provinces, including storage infrastructure vital for the storing of food and other key products.



### Camagüey Province

- Commercial and food infrastructure was severely affected. In the municipality of Esmeralda, damage was reported on the warehouse roof of “La Victoria” Bakery, which has a daily production capacity of over 1 ton.

### Villa Clara Province

- In the municipality of Sagua la Grande, a warehouse of the Ministry of Trade, storing about 5,000 tons of commodities, was practically destroyed by strong winds.
- In the municipality of Caibarien, the passage that connects this territory to Cayo Santa Maria was affected, with damage to three of its 45 bridges. The roof of the supply warehouse of the Ministry of Tourism was also significantly affected.

### Other provinces

- In Ciego de Avila and Las Tunas Provinces, damage to commercial infrastructure and “bodegas” (food distribution points for the population) were reported. In Las Tunas, 47 warehouses of the Ministry of Commerce and 20 bodegas were affected.
- Given the flooding in Cacocum Municipality (Holguin Province), the containment dam along the railway line collapsed. This led to surges in inhabited areas, such as La Agraria.
- In Guantanamo Province, strong winds and flooding affected some roads and bridges as well as the runway of Gustavo Rizo Airport in Baracoa Municipality.

### **Response/Preparatory measures:**

- Specialized teams have been created across the country to address the damage and provide support to the most affected municipalities.

### **WFP:**

- WFP has five mobile storage units (MSUs) in-country that could be re-directed to the most affected areas to protect food slated for the population, in support of local authorities.
- Following the impact of Hurricane Irma, WFP is monitoring the damage due to wind, rain and storm surge on infrastructure for the storage, preparation and distribution of food to vulnerable groups, taking into account lessons learned from previous experience.
- WFP is in constant contact with its headquarters and regional bureau to ensure timely assistance according to national needs.

## General Coordination

The UN Disaster Management Team (UNDMT) began an analysis of the primary damage as a result of Hurricane Irma. As part of the response plan, the UN Emergency Technical Team (UNETT) has advanced a first draft of the application to the Central Emergency Action Fund (CERF), a humanitarian fund established by the General Assembly of the United Nations Organization.

The United Nations System is in constant dialogue with national authorities to define the most affected areas in order to focus all humanitarian interventions.

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For further information, please visit:

Instituto de Meteorología de Cuba: <http://www.met.inf.cu>

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