



### **Cuba: Beyond a Simple Response to Hurricanes**

*By: Lic. José Llanes Guerra, National Office for Disasters, Cuban Civil Defense Dr. Madelyn Montes de Oca Días, Cuban Red Cross*

#### **Introduction**

The loss of human lives, ensuing health problems and the recovery capacity developed after the impact of a hurricane in this country, are preceded by the political will of the Cuban government, and the commendable efforts devoted to coordinate the country's resources allocated to the Measure System for Civil Defense.

The existence of legal standards for disaster reduction, which are firmly enforced; investment programs aimed at improving the population's quality of life; existing rights to health, education, culture, adequate housing, work and social security; the implementation of structural measures (dams, sewer and water supply systems); the development and strengthening of institutional capacities, particularly with regards to surveillance, monitoring and early warning services; the management and coordination of the Measure System for Civil Defense; and the broad-based participation of the population in an organized manner, are essential aspects that contribute significantly to the success of our responses in Cuba.

Two different hurricanes: only one path

With no precedent in the history of Cuba, two hurricanes, Isidore and Lili, pounded the Isle of Youth and Pinar del Río in just a 10-day period, following a similar path.

In the morning of September 14, Isidore started to develop from a strong tropical wave near Trinidad, one of the southernmost islands of the Lesser Antilles. On September 19, it reached hurricane status and, in the morning of September 20, when it was heading south, near the Isle of Youth, the hurricane had already reached category two. On that same day, Isidore turned toward the western portion of the Isle of

Youth, moving toward the west-northwest. Following this path, Isidore crossed over the western part of the Isle of Youth in the morning and, in the afternoon –around 2:00 p.m., it approached Pinar del Río. While passing over the Cuban archipelago, winds decreased to 140 km/hr and Isidore downgraded to category one, but it still caused heavy rains and high waves that reached up to 150 meters inland. Isidore continued its slow motion over Cuba before moving across the Atlantic.

In the afternoon of September 21, Lili also formed from a strong tropical wave to the east, not far from Barbados. In the morning of September 30, it reached hurricane status, moving toward the eastern portion of Cuba. Lili gained intensity and followed the same path. At 6:30 a.m., it crossed the southwestern part of the Isle of Youth, with sustained winds of up to 140 km/hr. After two hours, Lili started to move toward Pinar del Río with stronger winds of up to 160 km/h, becoming a category two hurricane. Around noon, it pounded Pinar del Río and, after two hours, Lili left Cuba and veered out to sea.

### The impact

During an interview on national television, one of the victims stated that “what Isidore did not ravage in six hours, Lili could destroy in only two [hours]”. Isidore was characterized by heavy rains, which contributed to pave the way for Hurricane Lili which, unlike its predecessor, it also featured strong winds that hit buildings whose foundations and structures had already been weakened. In general, thousands of schools and health facilities were affected or destroyed completely. Some coastal settlements were literally swept away and other villages were isolated due to severe flooding. Furthermore, water, power and telephone services were seriously damaged and, in terms of agriculture, crops, poultry and cattle that were used to feed the population were lost.

Despite their intensity, both hurricanes caused only one death. Although some 700,000 people were evacuated to safer places, there were no reports of injuries. People were provided with water, food and healthcare, while students and community members who belong to “entertainment groups” carried out a number of recreational activities with evacuees.



In the year 2001, more than 160,000 houses were destroyed or at least severely damaged by Hurricane Michelle. These houses were rebuilt in less than one year.

### The recovery stage

Once danger ended within affected areas, assessment was carry out regarding damages and immediate needs. In addition, all civil defense measures planned for the recovery stage were taken, devoting a number of efforts so that the population could go back to normal.

Reconstruction of houses, health facilities and schools began immediately. Students, teachers, healthcare professionals and communities at large participated in this process. Reestablishment of power, communication and water supply services represented a major priority during this stage. Within a few hours, construction and specialized brigades were sent to disaster areas to support local efforts. In this manner, all of these services were fully restored in less than one month.

Some people will have to wait for quite some time before their houses, their children's schools, the local bakery or the neighborhood's movie theater are rebuilt. They, however, trust their government and the Cuban Revolution, which have not abandoned them. They still remember the damages caused by Hurricane Michelle, which reached category four in November 2001. Although Michelle destroyed more than 160,000 houses, they were rebuilt or constructed in safer places, using appropriate materials and technology, as precautionary measures for future disasters.

International humanitarian aid was not officially requested by the government of Cuba, taking into account the capacity of this country to respond to a disaster. Assistance, however, was offered by the United Nations, international cooperation agencies, governmental and non-governmental organizations. In this sense, aid received was used to complement national efforts and resources allocated to rebuild houses, schools and other social facilities. We consider that this is the most objective and efficient way of using these resources, after the occurrence of a disaster.

### **Lessons learned**

Although most of our efforts are devoted to promote risk prevention and preparedness among the population at large –taking into consideration that the cost-benefit or cost-effectiveness ratio of actions is greater, lessons learned during this cyclonic season will be incorporated into methodological and planning processes for future responses. This will contribute to improving the Measure System for Civil Defense and, therefore, to ensuring and protecting the social and economic achievements of our people against any adversity.

Note from the authors: A report on Hurricanes Isidore and Lili was prepared by an UN Interagency Mission, and it's available at the following URL: <http://www.onu.org.cu>