



TODAY'S NEWS

Updates | News | Information

IT ONLY TAKES 1 Be prepared!

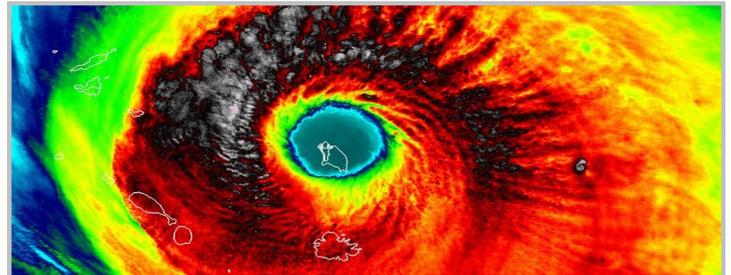
A direct hit last September by Hurricane Maria — a catastrophic category 5 hurricane — left a trail of destruction on the Caribbean island of Dominica, where the fishing community suffered millions of dollars in losses, including 40% of its fleet, in the wake of the storm. Barbuda had previously been devastated by Hurricane Irma, which had also caused monumental losses to the fishing community there.

It can never be said enough that it only takes one hit to devastate places that lie within the hurricane belt, and so preparation is key. Although the previous
(Continued on page 7)

“ Hurricane season routinely strikes the Caribbean harder than the U.S. ”



Mangled roofing in the foreground of the Roseau Fisheries Complex, which suffered major damage due to Hurricane Maria
(Photo: Dominica Fisheries Division)



The eye of Hurricane Irma passed directly over Barbuda.

New protocol to adapt to climate change

Caribbean countries need to move speedily with putting in place climate-smart actions that will help to mitigate against the impacts of climate change and manage the risks posed by disasters such as hurricanes. The fisheries and aquaculture sector, which is a significant contributor to national and regional economies as well as to food security, is one of the most vulnerable sectors. With this in mind, the Caribbean Regional Fisheries Mechanism (CRFM) has been working to develop a novel protocol to integrate climate change adaptation and disaster risk management in fisheries and aquaculture into the

Caribbean Community Common Fisheries Policy (CCCFP).

The protocol was presented for review at the regional CC4Fish Workshop held on 18 April 2018 in Montserrat. It is to be finalized and submitted for approval by the governing bodies of the
(Continued on page 6)

“ The road ahead to build climate-smart, resilient economies, realize sustainable growth and development, and create jobs and prosperity for our people is a difficult and challenging path. ”

— Milton Haughton, CRFM Executive Director, 12th Meeting

New **FEWER** app to improve safety and disaster response



The app is available on Google Play



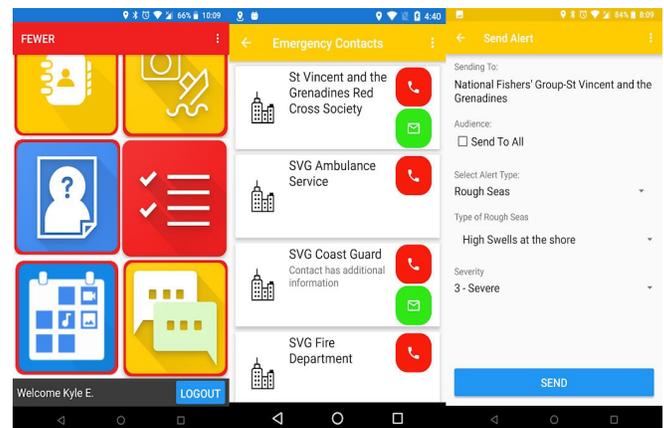
Fishers in St. Vincent and the Grenadines test FEWER in March 2018

FEWER should be integrated into existing national disaster risk management and emergency response frameworks

The Fisher Early Warning and Emergency Response (FEWER) mobile app gives fisherfolk in the Caribbean the tools to prepare and respond to the effects of climate-related disasters.

FEWER is being piloted in four CRFM Member States: St Vincent and the Grenadines, St Lucia, Grenada, and Dominica.

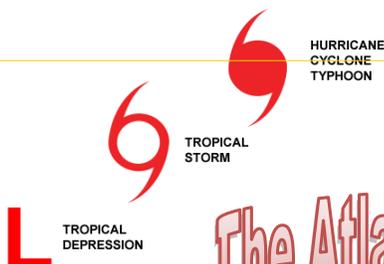
The app would enable fishers to receive early warnings of risky weather and sea conditions. They would also be able to share their information about local conditions and missing persons



The app's interface includes emergency contacts and options for sending alerts to the authorities.

through FEWER.

The ICT-based early warning system is expected to reduce fisherfolks' vulnerability to



The Atlantic Hurricane Season is JUNE to NOVEMBER

Tips for Fishers and Boaters

Securing boats and equipment are critical when a tropical storm or hurricane threatens

1. Boat moorings, anchors, chains, cables and ropes should be kept in good condition and rechecked well in advance.

2. Monitor and listen to the radio for regular weather reports, warnings and marine notices.

3. Remove fish pots and gear out of the water at the first warning.

4. Remove boats from the water if you can, or take them to one of the approved marine shelters.

5. If possible, move boats close to house. Fill boat with water or sand to weigh it down. Use tie-downs to secure the entire unit to the ground. Strip off and remove all loose or movable accessories.

6. Make sure that your boat or its moorings, anchors, etc. do not block or otherwise obstruct the navigable channel or other access into the mooring or anchorage. Leave room for late arriving boats.

7. Do not tie-up parallel to the bank or shoreline.

8. If possible, boats should be

moored in a group (rafted). Bow lines must be secured, individually tied to trees, (never to mangroves), piling, or other strong points on land; allowing sufficient slack for rising tides. The stern too should be similarly secured above ground or with an anchor or other strong point on the sea bed. Boats assembled in groups must also be secured to adjacent boats with breast-lines and spring lines forward and aft. Fenders or cushions of car tires should be placed between the boats to absorb movement, impact, and friction.

9. Mooring lines and cables should be of sufficient strength and long enough to absorb any surge or excessively high tides. They must be protected against chafing.

10. Moor and secure your boat well in advance of the Tropical Storm or Hurricane; then, leave it and do not return to it until the storm has passed and the winds and seas have subsided.

11. Relatively large vessels may not fit into the listed marine shelters. Their operators should seek other



places to safely secure their vessels which are comparable with the respective size and type of vessel, or put vessels to sea in due time to travel away from the storm or hurricane to avoid it altogether.

Managing Disaster Risk While Adapting to Climate Change



Climate change will inevitably have an effect on the frequency and intensity of natural disasters such as hurricanes, and so the region must be strategic in moving ahead with building more resilient communities.

Across the Caribbean, some of the most vulnerable communities are fishing communities, which often exist in low-lying areas along the coast. In 2012-2013, the CRFM collaborated with experts from Member States and regional partners, including the Centre for Resource Management and Environmental Studies at the University of the West Indies (UWI-CERMES), the United Nations Food and Agriculture Organization (UN FAO), the Caribbean Disaster Emergency Management Agency (CDEMA) and the Regional Climate Change Centre, to formulate the Climate Change Adaptation and Disaster Risk Management in Fisheries and Aquaculture in the CARICOM Region, a Regional Strategy and Action Plan (2013). The document was intended to empower all stakeholders in the region to take proactive measures to combat climate change.

Furthermore, the CRFM was one of the partners that contributed to the development of the first ever Caribbean Marine Climate Change Report Card, which became public in May 2017. According to the document, "Caribbean fishing is highly vulnerable to climate change, especially those in the Greater and Lesser Antilles. Caribbean fisheries are under threat due to changes in ocean currents and fish distribution, and loss of marine habitats. Coastal erosion is also compromising important fish landing beach sites and increasing intensity of storms together with increased

This vessel's roof was ripped off and its hull damaged. Its electrical parts were also submerged in water. (Photo: Hilroy Simon, Fisheries Division - Antigua, Codrington Wharf)

The 'new normal' environment created by changing climate, warming and increasingly acidic waters is characterized by the types of destructive storms and hurricanes that we have experienced in the region last year, Haughton recently said at the 12th Meeting of the CRFM

sea level causes damage to fish habitats, fishery access and assets."

According to NASA's Earth Observatory, climate change's impact on natural disasters can result in increased intensity of storms, including tropical cyclones with higher wind speeds. It notes, however, that, "Even if tropical storms don't change significantly, other environmental changes brought on by global warming could make the storms more deadly. Melting glaciers and ice caps will likely cause sea levels to rise, which would make coastal flooding more severe when a storm comes ashore."

In a paper titled, *The implications of global climate change for fisheries management in the Caribbean*, Dr. Leonard Nurse of CERMES wrote in 2011 that the consequences of climate change on Caribbean fisheries are likely to be mostly negative. Adverse impacts are expected to manifest themselves through

Managing Disaster Risk While Adapting to Climate Change



Office of the Fisheries Division at the Roseau Fisheries Complex, Dominica post Hurricane Maria, Sept. 2017

(Photo: Fisheries Division, Dominica)

habitat alteration and loss, reduced abundance and diversity, and shifts in distribution induced by changes in ocean currents. He said that those with a stake in the industry should expedite the 'mainstreaming' of climate change considerations into ongoing fisheries management programmes.

Dr. Nurse also said that, "industry stakeholders in the Caribbean need to become more actively engaged in the global and regional debate, which hopefully will provide the consensus for a solution that is lasting and equitable."

The CRFM has been working ardently with other stakeholders — fishers and NGO partners — to help with climate-smarting the sector. The CRFM is co-implementing the marine sub-component of the the Climate Investment Fund's Pilot Program for Climate Resilience (PPCR), Caribbean Regional Track. The project will assist with generating the



RISK INSURANCE FOR FISHERS

Promoting resilience to a changing climate

"Having such an insurance scheme is one of the good things we can do to help fishers get back on their feet as soon as possible after a disaster."

— CRFM Executive Director

Since 2015, the United States Department of State has been partnering with the World Bank, CRFM, the Caribbean Catastrophe Risk Insurance Facility (CCRIF), the Caribbean Network of Fisherfolk Organizations (CNFO), and others to develop an **insurance** policy for Caribbean governments to help protect the fisheries sector from climate-related disasters.

- The insurance policy would provide incentives for governments to promote and implement international best practices in fisheries management and a disaster risk management regime.
- Countries with good fisheries management systems and disaster risk management plans in place for the fisheries sector would pay lower premiums and receive higher payouts if there is a disaster.
- Payouts would be made by the insurance facility when the agreed trigger event occurs. The funds should be used to help with the rehabilitation and reconstruction of the fisheries sector.

The CCRIF is also in the process of developing a **micro-insurance policy for low income persons** in the fisheries in the region. The Livelihood Protection Policy (LPP) is designed to protect low-income earners against extreme weather risks. It would be made available through existing insurers.

The LPP is being customized for small-scale fishers and small aquaculture operators in the region, to help

New protocol to adapt to climate change

(Continued from page 1)

CRFM in the coming months.

The development of the protocol has been fast-tracked, as the CRFM is aware that due to climate change, the region can expect to experience higher averages of sea water and air temperatures. It can also expect changes in the pattern and seasonality of rainfall, making for more arid dry-seasons, wetter rainy seasons, and increased rainfall intensity. Rising sea levels are also expected to give rise to higher risks of storm surges and coastal inundation, as well as more intense storms and hurricanes.

The Protocol to Integrate Climate Change Adaptation and Disaster Risk Management into the CCCFP is very proactive in that it defines measures to be incorporated into Policy to reduce vulnerability and enhance resilience throughout the aquaculture and fisheries sector, including fishing communities.

It also aims to intensify cooperative efforts of CARICOM Member States to address the impacts of global climate change, climate variability and ocean acidification on the sustainability of fish stocks and the ecosystems that support them.

Effective collaboration will:

- (1) *Strengthen protection of fishing communities;*
- (2) *Increase food security; and*
- (3) *Improve security of the livelihoods of fishers and others who depend on*



Representatives from CRFM Member States meet to refine draft protocol

fisheries and aquaculture.

The new Protocol sets a framework for the definition and implementation of measures required to reduce vulnerability and enhance resilience throughout the aquaculture and fisheries value chains. This includes protection of fishing communities, food security and the livelihoods of persons who depend on the sector.

The Protocol was developed by the CRFM with support from the Food and Agriculture Organization of the United Nations (FAO). The CRFM is a regional partner in the CC4FISH project for Climate Change Adaptation in the Eastern Caribbean Fisheries Sector, funded by the Global Environment Facility (GEF) and implemented by FAO. It is under this umbrella that the new initiative is being implemented for the benefit of the CRFM'S 17 Member States.

The Common Fisheries Policy is a regional policy that focuses on cooperation and collaboration of Caribbean people, fishers and governments in conserving, managing and sustainably utilizing fisheries and related ecosystems.

The regional protocol to integrate climate change adaptation and disaster risk management in fisheries and aquaculture into the CCCFP will also address issues related to production, processing, marketing and trading of fishery and aquaculture products. Catastrophic events can disrupt the fisheries value chain; however, effective strategies can help to ensure that the sector bounces back as quickly as possible.

The Protocol will apply within national waters as well as onboard vessels on the High Seas which fly the flags of participating states and wherever participating states have jurisdiction.

IT ONLY TAKES 1

(Continued from page 1)

forecasts for the 2018 Atlantic Hurricane Season called for an above-normal season, updated forecasts issued early August now call for a higher probability of a below-normal season, lowering the chances of a major hurricane striking the US and the Caribbean.

NOAA predicts a 40-percent likelihood of 9 to 13 named storms (winds of 39 mph or higher), of which 4 to 7 could become hurricanes (winds of 74 mph or higher), up to 2 of them being major hurricanes (category 3, 4 or 5; with winds of 111 mph or higher). In an average hurricane season, there are about 12 named storms, of which 6 become hurricanes, including 3 major hurricanes.

The first cyclone to form in the Atlantic for 2018 has proved deadly in Cuba, where at least 7 fatalities were reported, and in North Carolina, USA, where at least two others were reportedly killed.

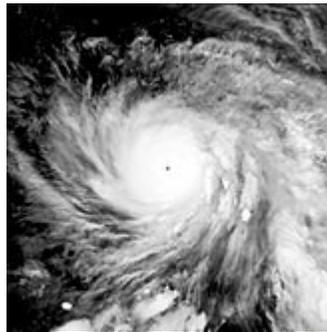
The deadly storm emerged when just before the start of the season, a disorganized disturbance dumped heavy rain over portions of Belize then migrated north, to the Gulf of Mexico, where it became a tropical storm, producing torrential rains and life-threatening floods in some affected areas.

Last year, the first named storm, Arlene, formed in April, and the last, Rina, was active from 5-9 November. In 2017, there were 17 named storms, well above the season average. Of those, 9 were hurricanes, with 6 being major hurricanes—two of which devastated the Caribbean.

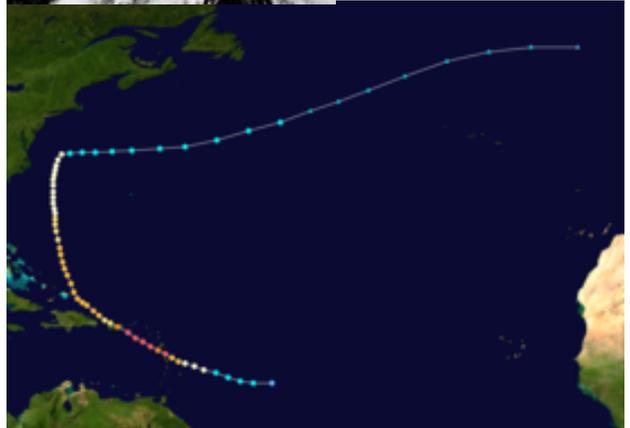
That year is now on record as the costliest, with a tab of over US\$280 billion, and it has recently been recorded as one of the deadliest in recent history, with a death toll now estimated at over 4,000. A study published recently in the *New England Journal of Medicine* said that based on the results of a

IT ONLY TAKES ONE STORM TO DEVASTATE A COMMUNITY.

“Hurricanes can be dangerous. Listening to the hurricane warning messages and planning ahead can reduce the chances of injury or major property damage,” the Caribbean Disaster Emergency Management Agency (CDEMA) warns.



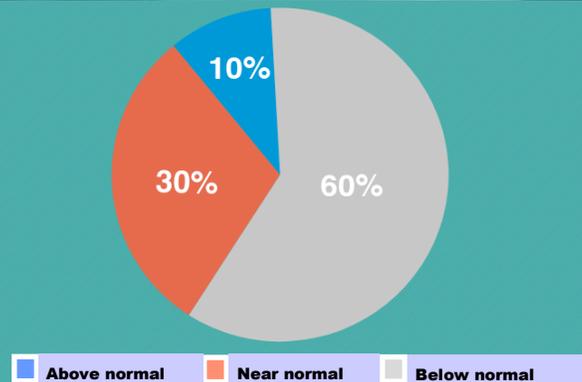
HURRICANE MARIA was the most devastating hurricane to hit the Caribbean in 2018, resulting in record damage to Dominica. It is the tenth deadliest storm on record.



2018 Atlantic Hurricane Season Outlook



A 40 percent chance that the 2018 Atlantic hurricane season will be near- or above-normal season.



Named storms
9-13

Hurricanes
4-7

Major hurricanes
0-2

Season probability

Source: NOAA's Climate Prediction Center, 9 August 2018

ABOUT US



Caribbean Regional
Fisheries Mechanism

Towards Sustainable
Development of
Fisheries for the People
of the Caribbean

The Caribbean Regional Fisheries Mechanism (CRFM) was officially inaugurated on 27 March 2003, in Belize City, Belize, where it is headquartered, following the signing of the “Agreement Establishing the CRFM” on 4 February 2002. It is an inter-governmental organization with its mission being “To promote and facilitate the responsible utilization of the region's fisheries and other aquatic resources for the economic and social benefits of the current and future population of the region”.

The CRFM consists of three bodies: the Ministerial Council, the Caribbean Fisheries Forum, and the CRFM Secretariat. Its members are Anguilla, Antigua and Barbuda, The Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Haiti, Jamaica, Montserrat, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, Trinidad and Tobago and the Turks and Caicos Islands.



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CRFM—Facilitating the sustainable use of the region's fisheries!