

# Caribbean gets smart to cope with hurricanes

September 25 2019, by Gemma Handy

---



A farm workers walks through a drought-affected farm in Enfield, St Mary, Jamaica, where increasingly volatile weather patterns have taken a toll on agriculture

After monster Hurricane Irma annihilated the farm sector of Barbuda in 2017, growers got smart: among other changes, they moved their crops to higher ground.

There and elsewhere across the Caribbean, as tourism-dependent island nations cope with record-breaking storms and rising sea levels blamed on global warming, the region is devising savvy ways to diversify islands' economies and boost food security.

Another taste of pain came this month as Hurricane Dorian devastated parts of the northern Bahamas.

Indeed, the Caribbean and its 44 million people could be facing their biggest crisis to date as [extreme weather](#) delivers a double whammy to tourism and the region's ability to feed itself.

"Climate change has affected everything. How we eat, how we build, how we live our day-to-day lives," said Kendra Beazer of the Barbuda Council, which runs the internal affairs of the island, part of Antigua and Barbuda.

The Category 5 storm in September 2017 was the worst ever recorded in Barbuda, crippling its infrastructure and damaging 90 percent of its buildings. Today, some islanders still live in tents.

Besides moving crops to higher ground to escape [storm surges](#), planters have switched to hardier root vegetables and fruits that are resilient to unpredictable rainfall.

Smart greenhouses that are powered by clean energy and grow produce in a self-regulating, controlled micro-climate—rather than at the mercy of nature's whims—are also among methods tipped to boost food security, said Beazer.



Drought wiped out most of farmer Joan Johnson's 18-acre farm, and a bush fire took the rest, leaving little more than brittle, parched land

In Jamaica, increasingly volatile weather patterns are manifested in erratic rainfall, [higher temperatures](#) and rampant wildfires, said Glenroy Brown of the island's Meteorological Service.

Drought wiped out most of Joan Johnson's 18-acre plantain farm this year, and a bush fire took the rest. Where the crops that provided her income once thrived, little more than brittle, parched land remains.

**'It's been rough'**

"I've lost 2,000 plants since spring," she told AFP. "I live off this. It's been rough."

Fellow farmer Conrad Williams knows how she feels. His holding a short drive away has also suffered from months without rain, wreaking havoc on his peppers and pumpkins.

Johnson and Williams are two of 5,000 Jamaican farmers taking part in a climate-smart agriculture program run by the Netherlands-based Technical Centre for Agricultural and Rural Cooperation.

Planters have been trained to use sophisticated weather apps, downloaded onto smartphones, that can predict the weather three months in advance, for instance, as well as give information on wind direction and speed, temperature and humidity.

The information is shared at local farmer forums to help growers with limited internet access.



Vaughn Barnaby, of Jamaica's Rural Agricultural Development Authority (RADA), inspects a section of the Pagee River, outside Port Maria, St Mary, Jamaica, that has long been dry due to drought

On the tiny island of St Lucia, last year's Tropical Storm Kirk dealt a hefty blow to the banana industry, upon which the island's economy has long hinged.

In a matter of hours, 60 percent of the banana crop was destroyed. There and in other Caribbean countries, modern technology—in this case a digital currency—might also offer a solution to people's woes.

The island of 180,000 people is one of four nations taking part in a [digital currency](#) pilot project by the Eastern Caribbean Central Bank. It

is due to debut next year. The other three are Antigua and Barbuda, Grenada, and St Kitts and Nevis.

ECCB Governor Timothy Antoine said the move, set to eventually be rolled out across all eight countries in the region using the Eastern Caribbean Dollar, would be a "game-changer" for the way the Caribbean does business.

The cryptocurrency will slash cash usage, promote financial sector stability, and expedite growth and development, said Antoine.

Justin Ram, director of economics at the Caribbean Development Bank, said rebuilding and replacing infrastructure after natural disasters is causing some islands' debt-to-GDP ratios to sky-rocket.

"Some countries are in excess of 150%," he explained.

Destruction to the British Virgin Islands by 2017's Irma and Maria exceeded \$3.6 billion—more than three times the territory's GDP.



Delroy Luke, of Jamaica's Rural Agricultural Development Authority (RADA), in Enfield, St Mary, with locally-grown coconuts, as the region devises ways to diversify their economies and boost food security in the face of global warming

"Climate change is having a major impact on the region, and we can expect to be impacted more frequently by high intensity storms," Ram said.

"Having the ability to adapt to it and build resilient economies is where we need to focus. To do that, we will have to use more digital mechanisms," he added.

Other recovery schemes are also popping up.

In Dominica, where Prime Minister Roosevelt Skerrit broke down in tears on television as he spoke of the desolation unleashed by Hurricane Maria in 2017, passports can be obtained, for a price.

The nation has fueled a remarkable recovery using income from its Citizenship by Investment program.

The cheapest option for investors to obtain a Dominican passport is by making a \$100,000 contribution to the so-called Economic Diversification Fund.

© 2019 AFP

Citation: Caribbean gets smart to cope with hurricanes (2019, September 25) retrieved 27 April 2024 from <https://phys.org/news/2019-09-caribbean-smart-cope-hurricanes.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.