

New data suggests increased vulnerability for island countries

November 9 2017, by Alex Gumm



Credit: University of Notre Dame

As island nations prepare for a lead role in the 23rd annual Conference of Parties (COP23) in Bonn, Germany, Nov. 6-17, the latest data released by the <u>Notre Dame Global Adaptation Initiative</u> (ND-GAIN) shows that small island states face increasing challenges to address the



impact of climate change.

This year's record-breaking hurricane season in the Caribbean has exacted a serious toll on island nations. In the Pacific, most small <u>islands</u> have shown increasing <u>vulnerability</u> on the ND-GAIN Index over the last five years, including Fiji, Maldives, Samoa, Tonga and Vanuatu. For small island states, superstorms paired with rising sea levels pose particularly daunting hazards.

"This data suggests islands continue to suffer significant setbacks from <u>extreme weather events</u> and a longer trend of increased vulnerability," said Notre Dame political science professor Patrick Regan, who is associate director of the Environmental Change Initiative, which issues the annual index. "Ultimately, as a country's vulnerability increases, so must their investments in adaptive capacity."

The <u>ND-GAIN Country Index</u> uses over 20 years of data across 45 indicators to rank 181 countries on vulnerability to <u>extreme climate</u> <u>events</u> and readiness to successfully implement adaptation solutions.

By comparison, countries that have made the biggest gains as climate adaptors on the ND-GAIN Country Index over the last five years include several larger, inland and economically developing countries, such as the Democratic Republic of the Congo, Iran, Myanmar, Russia and Vietnam.



Increasing storm intensity in the Atlantic

In 2017, the impact of climate change continued to garner worldwide attention, and underscore the need for climate adaptation efforts.

This year's hurricane season saw a record-breaking level of extreme activity, and September set a record for the most active month of any Atlantic hurricane season.

Of the 13 named storms this season, eight have been hurricanes, with five of the eight — Harvey, Irma, Jose, Lee and Maria — reaching Category 3 or higher.



Credit: University of Notre Dame

Despite the increasing risk faced by coastal countries, island states around the world have taken action to prepare for climate threats.

Jamaica, for example, has enhanced its adaptive capacity over the past decade with improvements in sanitation facilities and access to reliable drinking water. The country has simultaneously become less dependent on imported energy and now fares considerably better than the global average change in vulnerability.

A full country ranking, as well as country profiles and visualization tools,



is available at gain.nd.edu/country to help public and private sectors as they make investments for the common good. Extensive online tools allow users to compare <u>climate</u> risks and opportunities.

Provided by University of Notre Dame

Citation: New data suggests increased vulnerability for island countries (2017, November 9) retrieved 26 April 2024 from <u>https://phys.org/news/2017-11-vulnerability-island-countries.html</u>

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.