Climate change will more than double the risk of intense tropical cyclones by 2050

**Story Source:** [**University of Southampton**](https://www.southampton.ac.uk/).

<https://www.sciencedaily.com/releases/2022/04/220427140613.htm>

Despite being amongst the world's most destructive extreme weather events, tropical cyclones are relatively rare. In a given year, only around 80-100 tropical cyclones form globally, most of which never **make landfall**. In addition, accurate global historical records are **scarce**, making it hard to predict where they will occur and what actions Governments should take to prepare.

To overcome this limitation, an international group of scientists **developed a new approach** that combined historical data with global climate models to generate hundreds of thousands of "synthetic tropical cyclones." Dr. Nadia Bloemendaal from the Institute for Environmental Studies, Vrije Universiteit Amsterdam, who led the study, said: "Our results can help identify the locations **prone** to the largest increase in tropical cyclone risk. Local governments can then take measures to reduce risk in their region, so that damage and fatalities can be reduced. With our publicly available data, we can now analyze tropical cyclone risk more accurately for every individual coastal city or region".

The team's analysis found that the frequency of the most intense cyclones, those from Category 3 or higher, will double globally due to climate change, while weaker tropical cyclones and tropical storms will become less common in most of the world's regions. Many of the most at risk locations will be in **low-income** countries. Countries where tropical cyclones are relatively rare today will see an increased risk in the coming years, including Cambodia, Laos, Mozambique and many Pacific Island Nations, such as the Solomon Islands and Tonga. Globally, Asia will see the largest increase in the number of people **exposed to** tropical cyclones, with additional millions exposed in China, Japan, South Korea and Vietnam.

Dr. Ivan Haigh, Associate Professor at the University of Southampton, said: "Of particular **concern** is that the results of our study highlight that some regions that don't currently experience tropical cyclones are likely to in the near future with climate change. The new tropical cyclone dataset we have produced will greatly aid the mapping of changing flood risk in tropical cyclone regions". The study could help governments and organizations better assess the risk from tropical cyclones, thereby supporting the development of **risk** **mitigation** strategies to minimize impacts and loss of life.

**Questions**

1. Are tropical cyclones frequent and easily-predictable weather events?
2. What are the advantages of a new approach developed by the international group of scientists?
3. Which countries will be prone to the risk of intense tropical cyclone increase?
4. Is it possible for people to take destructive weather events under control?

**Vocabulary**

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* scarce [skeəs]– недостаточный, скудный
* to develop a new approach – разработать новый метод
* prone to – подверженный
* low-income – c низким уровнем доходов
* exposed to – подверженный
* concern – беспокойство, заинтересованность
* risk mitigation – уменьшение риска

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