The Moscow Times
30 YEARS
INDEPENDENT NEWS FROM RUSSIA

More Climate Change Means More Disasters

By Julian Hunt

December 03, 2012

The devastation wrought by Hurricane Sandy, 253 deaths and more than $50 billion in economic damage, is prompting renewed thinking about climate change and national security.

Within this broad-ranging debate, one particular issue that has grown in salience, post-Sandy, is whether climate change means storms will be more intense. The balance of risks is that they will, with the biggest threat from increased flooding caused by sea-level rises as well as increase in rainfall intensity and rainfall rate.

This has key implications for all of us, especially government and insurers as they assess and plan for volatile weather.

According to the World Meteorological Organization, which is part of the United Nations, global warming will likely cause the intensity of tropical cyclones to shift toward stronger

storms. Increases in rainfall rates within 100 kilometers of the storm center are also projected.

Flooding is likely to become more common because of increased moisture in the atmosphere. The sea-level rise factor is especially important because the number of coastal communities has risen sharply in recent decades. In the case of Sandy, most damage was caused by flooding, the exception being weak structures near the shoreline that were destroyed by strong winds.

As Sandy revealed, tremendous advances have been made in our understanding of the physics that drive cyclones. Computer forecasting now does a great job of predicting areas where a cyclone will likely hit.

Government disaster-preparedness agencies must urgently re-evaluate flood mitigation plans. This should include assessments of dikes and sea walls as the first line of defense against storm surge, inspections of drainage systems in cities, reinforcement of dangerous slopes and establishment of warning systems for flash flooding in mountainous regions.

Since climate change will lead to an increased number and intensity of storms, it is vital that we redouble our efforts to prepare for the problems this will bring.

Julian Hunt is visiting professor at Delft University. Johnny Chan is chair of the World Meteorological Organization's Tropical Cyclone Panel.

Related articles:

- Heavy Snowfall Delays Hundreds of Flights
- City Criticized as Snow Paralyzes Traffic
- Hunger Strikes in Industrial Heartland Test Loyalty to Putin

The views expressed in opinion pieces do not necessarily reflect the position of The Moscow Times.

Original url:
https://www.themoscowtimes.com/2012/12/03/more-climate-change-means-more-disasters-a19886