

PH faces disasters 'others haven't seen'

Friday 24 January 2020, by [ENANO Jhesset O.](#) (Date first published: 24 January 2020).

Rising carbon dioxide emissions globally could double the number of intense storms and floods in 13 years, which could severely damage the environment, hamper socioeconomic progress and threaten the lives of millions worldwide, according to a new paper published on Thursday.

Such scenario could be more devastating for the Philippines, which faces several extreme events in a single year and where many are exposed to hazards.

Researchers Ramon Lopez, Vinod Thomas and Pablo Troncoso published the study in *Climate, Disaster and Development Journal*, using climate data from 155 countries, spanning 46 years, from 1970 to 2016, for it.

Instead of climate models, their research adopted a statistical and econometric approach in assessing the factors that contribute to the increase in frequency of intense floods and storms.

They analyzed the data by including vital socioeconomic factors, such as people's exposure to hazards and their vulnerabilities.

Their findings showed that in addition to these factors, the continuous rise in atmospheric carbon dioxide concentration in the past four decades was significantly correlated with the increase in extreme disasters.

At least 100 deaths

Extreme disasters are defined as those causing 100 or more deaths and/or affecting 1,000 or more people.

The trend of more frequent storms and floods is also statistically and clearly established as a result of climate change, the study showed.

"The results suggest that if the carbon dioxide level increases by 1 percent, floods and storms would increase by nearly 9 percent," Thomas, a visiting professor with the Asian Institute of Management, told the *Inquirer*.

The study showed that the yearly increase in atmospheric carbon dioxide has been 2.4 parts per million (ppm), or about 0.6 percent from the base 396.5 ppm from 2010 to 2016.

"Accordingly, the number of intense hydrometeorological disasters could increase by 5.4 percent annually for an 'average' country facing nearly one extreme disaster annually," Thomas said.

Much more serious for PH

For the Philippines, however, it is much more serious: "You are looking at more disasters that others haven't seen," Thomas said.

Compared with the average of a single disaster in other countries, the Philippines faces about nine extreme events, as seen between 2010 and 2016, he said.

“One more extreme event in the Philippines, for example, one more Supertyphoon ‘Yolanda’ (international name: Haiyan) or Typhoon ‘Pablo’ (Bopha) or Tropical Storm ‘Ondoy’ (Ketsana), would strain the country’s ability to cope,” Thomas said.

While doubling the number of disasters in the Philippines would be an extreme case, the results would be “catastrophic,” he said.

India, China, Australia

High risks are also seen in other countries, such as India, China, Bangladesh and Australia.

Thomas said the study complemented earlier reports released by the Intergovernmental Panel on Climate Change, which used climate models to warn of catastrophic impacts in the near future if human-caused emissions of carbon dioxide are not curbed.

The authors said the global evidence presented in their paper, along with other similar studies, were calls to action for governments to step up their economic and environmental policies to curb growing damage from natural calamities.

“Rather than reacting to events as one-off and unpredictable occurrences, man-made events call for investments in prevention and mitigation programs,” they said.

Risk reduction, mitigation

More investments in disaster risk reduction and mitigation are also needed from individual countries and the global community, the study said.

For the Philippines, Thomas said the country would have to redouble its efforts in climate change adaptation.

More financial allocation for disaster management and disaster insurance, he said, would be among the crucial steps that the government would have to take.

“But all the adaptation in the world will not be enough if we do not mitigate,” Thomas said. “The Philippines has to cut back on the use of coal and fossil fuels, and go all out for wind and solar power.”

The country remains heavily dependent on coal for its energy needs, despite the passage of legislation on renewable energy sources in 2008.

Socioeconomic factors, such as poverty and exposure to hazards, should also be dealt with, Thomas said.

Jhesset O. Enano

[Click here](#) to subscribe to our weekly newsletters in English and or French. You will receive one email every Monday containing links to all articles published in the last 7 days.

P.S.

Inquirer

<https://newsinfo.inquirer.net/1218940/ph-faces-disasters-others-havent-seen>