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Gone are the days when talking about the weather meant polite conversation. These days, it usually means trouble. Many want to know if the intensity of Supertyphoon “Yolanda” was fueled by climate change. The truth is that it’s too soon for any specific research to have been conducted and concluded to confirm that Yolanda was directly caused by global warming. However, we can take stock of what has been formally researched.

Ever since the discovery of climate change in the late 19th century, climate research has been a group effort—often by scientists who didn’t know each other and were disconnected by time and geography. This process holds true up to now.

In the last decade, scientists have done research on the correlation between tropical cyclones and climate change, but no group has unequivocally declared a direct cause-and-effect relationship. So far, results have been more like pieces of a puzzle offering snippets of a yet undefined scenery. In 1998, a group of climate scientists led by A. Henderson-Sellers came together and asserted that with a doubling of carbon dioxide in the atmosphere, tropical cyclones could be expected to increase their maximum potential intensity by 10-20 percent.

This report precipitated a slew of consequential studies. K. Emanuel of the Massachusetts Institute of Technology inferred in 1999 that storm intensity is influenced by the thermodynamics of the air and ocean along a storm’s path. In a later work with colleagues, he concluded that while the frequency of cyclones should reduce globally, it is found to increase in some areas—in particular, the West Pacific basin (where we are). Furthermore, cyclone intensity would also be expected to increase with ocean surface temperature in the same region. This report ran 2,000 synthetic events in five ocean basins using seven global climate models from various meteorological institutions.

This year, the Intergovernmental Panel on Climate Change concluded that ocean warming accounted for more than 90 percent of energy accumulated from global warming between 1971 and 2010. Sea surface temperatures have clearly risen and are expected to continue rising in the next decades. Scientific research on this subject is not limited to these reports. These conclusions have been well corroborated. But at the same time, we will not deny the presence of opposing positions.

In connecting the dots from one report to another, therefore, it seems very suggestive that global warming indeed plays an active role in creating high-intensity typhoons in the West Pacific basin.

This leads us back to Yolanda. Seeing the devastation on TV is sad enough. A friend came back from doing volunteer relief work in Tacloban City last week, and described the place as a war zone. It is just unthinkable! How could a mundane thing like the weather cause all that destruction in four hours?

Deadly typhoons have now become an enemy from which we cannot defend ourselves. They are now an issue of national security. Even the President cannot negotiate with the weather.

The concept of climate change as an issue of national security is nothing new. Many political analysts have recently asserted that Syria’s civil war goes deeper than the use of chemical

weapons. CNN reported that in 2009, there were already rumors about how the country's water shortage, due to a crippling drought, could have sparked internal conflict. It prompted the residents of about 160 villages to abandon their homes due to agricultural and livestock failures. We often overlook that hunger, thirst, poverty, and displacement can start a war.

If we go further back in history, many migrations were triggered by climate change. For example, archaeological findings reveal that in prehistoric times, the Sahara used to be a lush savannah that supported wildlife and trees. Then, when water tables receded and the Sahara became a desert, people migrated to the Nile and established the Egyptian civilization. Unfortunately, with the world's burgeoning population today, moving to greener pastures is most probably no longer an option.

What is even more disturbing is that the countries that suffer the brunt of climate change's repercussions are most likely not the largest carbon emitters. Industrialized countries still contribute more greenhouse gases then developing countries. Yet it is usually the poorer countries and marginalized people who bear the consequences.

According to a World Bank report, the Philippines is No. 40 on the greenhouse gas emissions list. The top five emitters are China, the United States, India, the Russian Federation, and Japan.

Climate change is not just a national issue that can be resolved within the bounds of our sovereignty. Similar to how scientists found out about it, addressing climate change is a group effort. No one country can do this singlehandedly. After all, the air around us knows no bounds. Once carbon dioxide escapes into the atmosphere, it doesn't belong to any country; it belongs to our planet.

It is time for the Philippines to take a more active part in international climate affairs, because we are vulnerable.

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