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Headline: A way to tame perfect storms

Byline: Narciso Reyes Jr.

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When Supertyphoon “Yolanda” slammed into the coastal areas of Eastern Visayas on Nov. 7, 2013, the category-5 howler, admiringly called by meteorologists a “perfect storm,” unleashed a mind-boggling destructive force many times more powerful than the total energy of all the explosives used in World War II, including the atomic blasts in Hiroshima and Nagasaki, according to climatologists.

Yolanda, the strongest recorded typhoon in Philippine history, if not the entire world, packed center winds of 319 kilometers per hour just before it struck Samar and Tacloban, Leyte. Its fury cut a swath of death and destruction across the economically poor, agricultural part of the country. As it exited days later in the South China Sea, the perfect storm left in its wake an estimated human toll of 8,000 dead and over 4.4 million displaced persons. The hundreds of thousands of destroyed homes and buildings, severely damaged infrastructure and communications systems, and ravaged farms would translate into an economic loss of up to $15 billion. It would have been much greater if large cities and manufacturing areas had been in its path.

With the oceans getting warmer due to climate change, weather experts warn that more storms like Yolanda would strike the Philippines repeatedly, as well as different parts of the world in the years ahead.

The Philippines is particularly vulnerable because of its geographical exposure to the most prolific breeding ground of tropical cyclones in the world: the Philippine Sea and Western-Pacific Ocean which spawn up to 15 typhoons of varying intensity annually.

To date, no one has discovered an effective way to mitigate these extreme weather disturbances—despite dazzling scientific and technological breakthroughs in our century that have resulted in the harnessing of atomic energy for peaceful use, manned landings on the moon, and a myriad of practical conveniences that the modern world cannot do without such as cell phones, the Internet, microwave ovens, medical x-rays and television.

The United States made a bold attempt to tame severe tropical cyclones when it launched the project “Storm Fury” in the 1970s, but tens of millions of dollars in research, using planes to seed clouds with silver iodide over spawning grounds in the Gulf of Mexico, proved ineffective. That’s because gathering storms, using the vast warm surface waters of oceans for their tremendous energy, easily overpowered and neutralized the seeding operations. The United States had to abandon the project.

Thomas Stocker, a world-renowned climate scientist at the University of Bern, appealed to the Philippines to spearhead a stronger commitment to combat global warming in the yearend climate talks in Paris.

The Philippines can play a commanding role during the conference because of its unique experience. “If your country raises its voice, it is a voice that is authentically communicating exposure and vulnerability and the risks that are associated with unchecked climate change,” Stocker told Filipino reporters during his recent visit in Manila.

Stocker particularly challenged Filipino scientists to be more proactive in the important next round of talks.

But what can the Philippines do to lead the charge? Certainly, global action requires more than just flowery speeches, hunger strikes, and the blowing of car horns. These daunting times demand concrete, effective action plans—not pity and doles.

The Philippine answer may be close at hand, however. Thanks to a Filipino inventor from Romblon, the world may be on the verge of devising a natural, eco-friendly way to tame perfect storms by using the very ocean waters that spawn them.

Ibarra Silverio told this writer in a recent exclusive interview that the best way to neutralize severe storms is to enlist the help of Mother Nature. But his plan would not abort beneficial low-pressure areas and weak typhoons that benefit the country. Briefly, Silverio's novel proposal is the opposite of the failed "Storm Fury": Rather than attacking the problem from above, by aerial cloud-seeding, his technological game plan would "cool the warm surface ocean water that births strong typhoons by using the cold water deep below."

How? By positioning a network of buoys, equipped with thermal sensors, in the favorite breeding ground of tropical typhoons such as the Mariana Islands region east of the Philippine Sea, and assembling a flotilla of techno ships especially designed to pump cold water from depths of up to 1,000 meters and spraying it in a calibrated fashion to prevent moisture formation that serves as fuel for typhoons. The most challenging part of the proposal is the design of the remotely-piloted submersible that must be tethered to each of the estimated 50-80 techno ships as the vessels perform their spraying operations at speeds of up to 15 knots per hour.

I was present when Silverio explained his idea to a panel of Filipino scientists at a Quezon City forum last week. The weather experts were impressed with his "ocean-cooling" concept after peppering him with tough technical questions. Their consensus was: "It's certainly worth a try, especially if the benefits outweigh the costs." The group members preferred to remain anonymous pending their respective agencies' commitment to the Silverio project.

It may be a long shot, but the ocean-cooling concept deserves to be tried and tested, if only for the advancement of humanity's learning experience in weather management. The Philippines and the international community have the moral obligation to at least look seriously into Silverio's unique proposal. After all, his plan looks much cheaper to implement than the costs inflicted by supertyphoons.

Narciso Reyes Jr. () is an international book author and former diplomat. He lived in Beijing in 1978-81 as bureau chief of the Philippine News Agency.