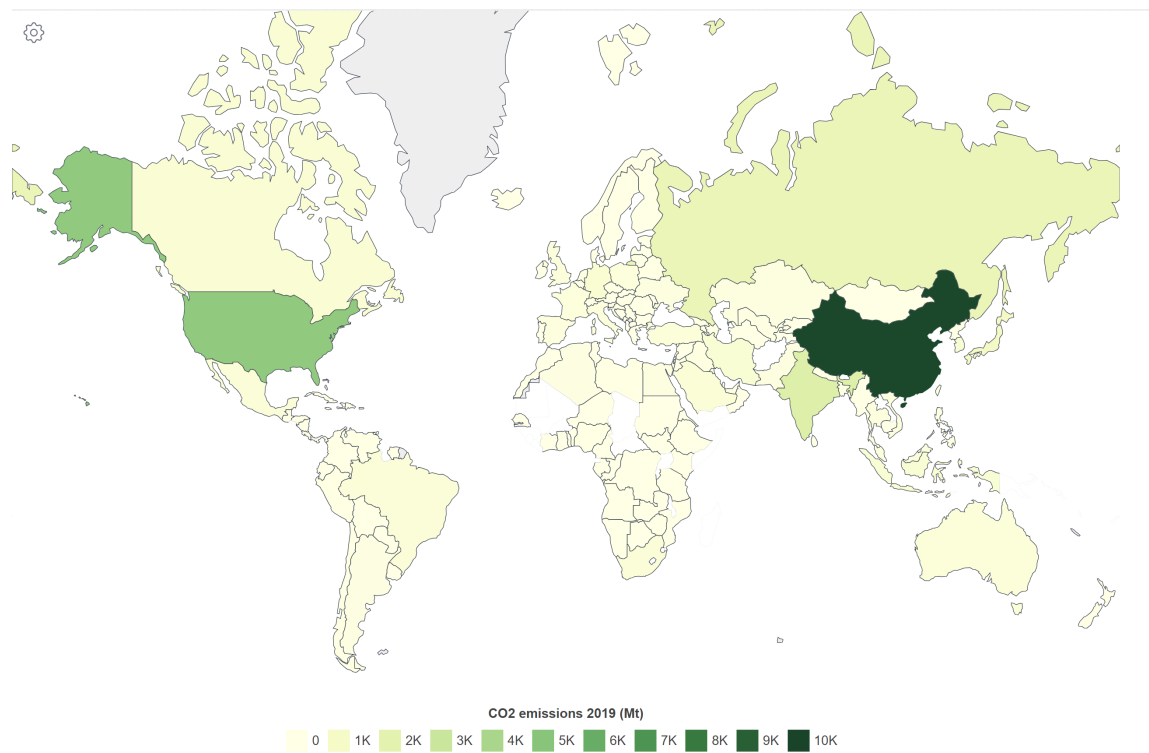


## 1 Impacts of climate change on developing nations

While developing countries (excluding India and China) have only contributed **35%** of the greenhouse gas emissions (GHGs) last 2011, they are **disproportionately facing the negative impacts of climate change**, experiencing extreme heat waves, floods, and other climate-related disasters (Tietjen).



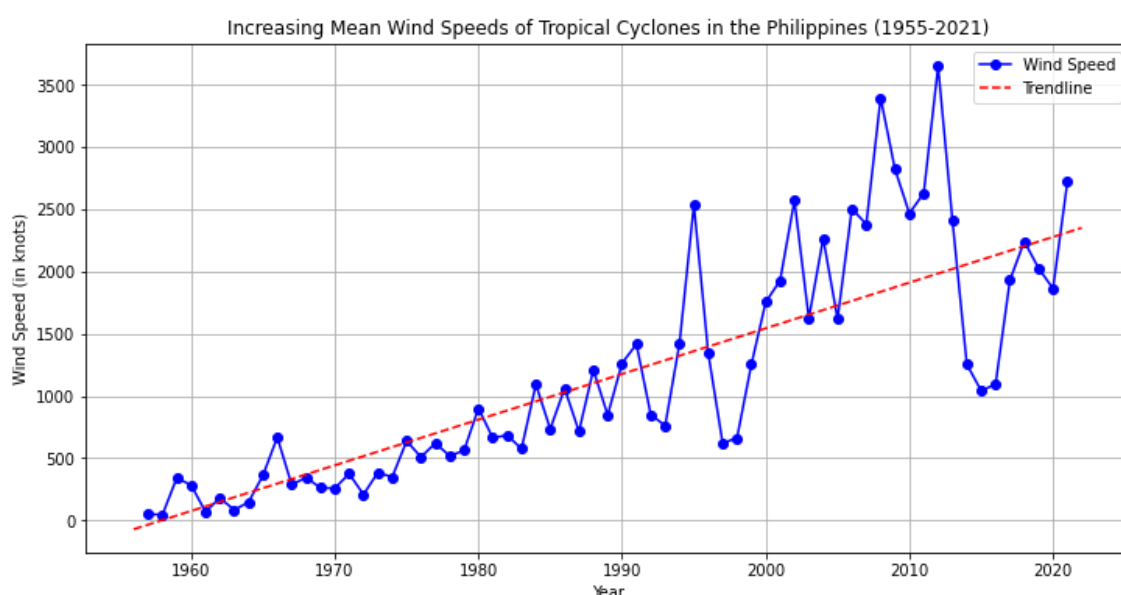
Source: World Population Review

## 2 Documenting people's stories

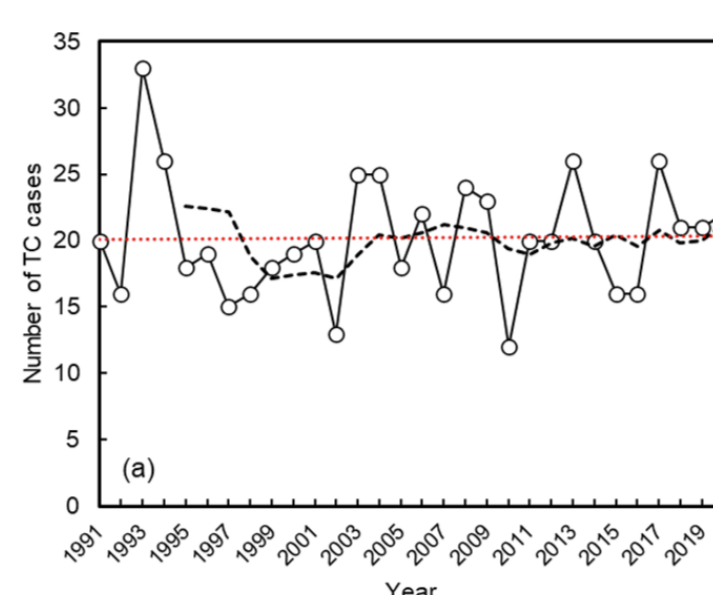
As a native of the **Philippines**, I went back to my hometown, Cauayan, to share with you how this is manifested even in the smallest form of community. *More than the numbers, how is climate change affecting the people in the most remote areas of the planet?* With a **website** that shows data, images, videos, and interview, I aim to **amplify the voices of the unheard giving justice to the most vulnerable**.

## 3 Exacerbated typhoons

The Philippines is a developing country in Southeast Asia visited by an average of **20 tropical cyclones per year** (IAC). The warming of the oceans have **strengthened the typhoons** in Southwest Pacific (see figure below). PAGASA (our local weather service) has also seen an **upward trend on the number of tropical cyclones** visiting the Philippines. Even during my stay, **Supertyphoon Egay** made landfall in our region. With winds of up to **140 mph**, Egay has an estimated damage of **123.6 million USD** (INQUIRER.net).



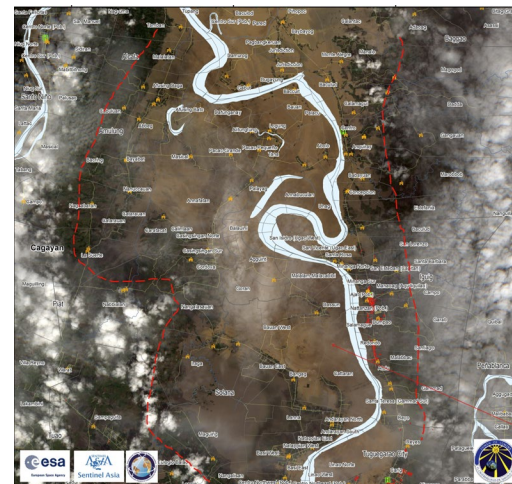
Data provided by Asia-Pacific Data Research Center; analysis found on my GitHub



Source: PAGASA

## 4 \$280M worth of agricultural damages in 2020

**42.51%** of the Philippines' lands is used for agriculture (World Bank). In Cauayan, the income source of most families including mine is agriculture. Because of the **weather's extremity and unpredictability**, all the farmers I interviewed have had **reduced profits** from crops (mostly rice and corn) being completely submerged in water and fallen due to floods and strong winds, respectively. Moreover, using **Sentinel-2 satellite images**, the rise of water in Cagayan River was observed from a typhoon last Nov. 13, 2020.



True color composite map showing the flooded areas. © Sentinel 2, Nov. 2020. All rights reserved.



Photos I took using a drone showing the fallen corn crops due to Supertyphoon Egay. Red marks indicate the fallen crops.



A photo I took of a local farmer spraying fertilizer on the rice crops

## 5 Compromised children's education

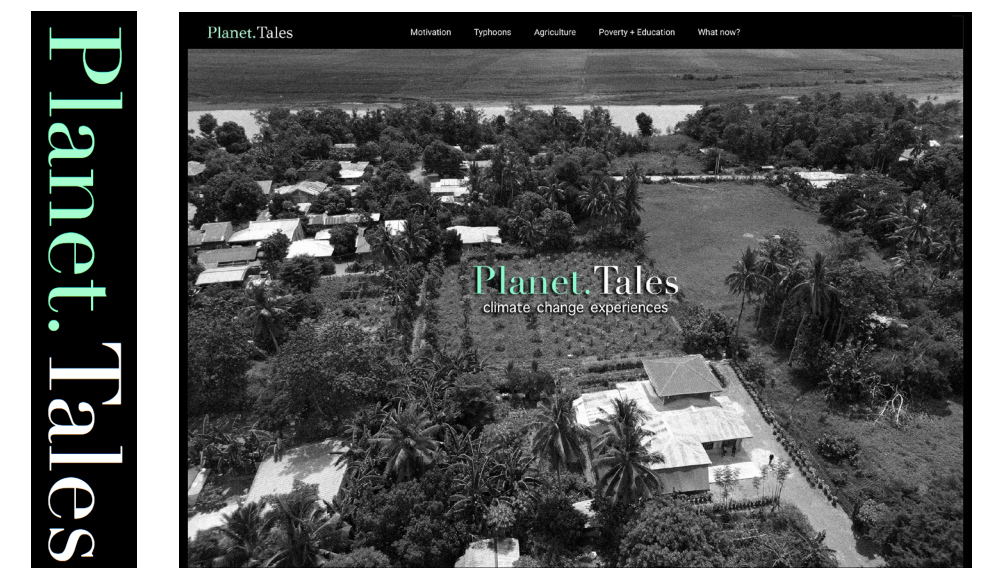
Apart from the 24% decline of the Department of Education's 2023 budget, the public education system still lacks **159,000 classrooms** to accommodate all students (Rappler). Consequently, according to my interview with teachers, some students of ages 10-12 are still **not able to read and perform basic mathematical operations**.



Photos I took in a **summer supplemental class** for kids who need further instructions.

## 6 The deliverable: a website

Using **HTML, CSS, and JavaScript**, I developed a website that portrays the locals' narratives revolving around the three themes: **typhoons, agriculture, and education**.



## 7 Conclusion

Every decision we make may affect a group of people **10,000 miles away from us**. We may be experiencing the same global environmental issue, but we do not have the same systems in place to mitigate and adapt to these changes. The worse part is that **none of the locals I interviewed is aware of climate change's role in their struggles**.

*Help me spread these stories, so people who have the means to initiate change can hear these voices.*



Follow @limit.dnex to see the images and videos I took for this project.



Check out the website! [planet-tales.org](https://planet-tales.org)



Short video edit on my Instagram showing my perspective during the onset of the typhoon