

4-29-2022

## Into the depths: Climate Change Part 2

Felicia Bedford  
*Duquesne University*

Follow this and additional works at: <https://dsc.duq.edu/duquark>



Part of the [Environmental Education Commons](#)

---

### Recommended Citation

Bedford, F. (2022). Into the depths: Climate Change Part 2. *D.U.Quark*, 6 (1). Retrieved from <https://dsc.duq.edu/duquark/vol6/iss1/6>

This Staff Piece is brought to you for free and open access by Duquesne Scholarship Collection. It has been accepted for inclusion in D.U.Quark by an authorized editor of Duquesne Scholarship Collection.

# Into the depths: Climate Change Part 2

By Felicia Bedford

Published April 29, 2022

*D.U. Quark* 2022. Volume 6(Issue 1) pgs. 36-41

Staff Article

*Dear reader,*

*Welcome back to the next segment of Into the Depths! In the last article, we talked about the effects of climate change on the countries of the United Kingdom. In this article, I will be exploring some Asian countries to see the impact climate change has on those regions. Stay tuned for the rest of the series where we will explore many more countries!*

## **India:**

In the country of grand palaces and bustling cities, I stand with my arms folded staring at the mounds of garbage in the streets. This global powerhouse is in danger. A study conducted by the University of Wuhan and several other Asian universities state that Asian countries are the most vulnerable to climate changes in the world (Bhuiyan). They studied several countries over an extended period to determine this (Bhuiyan). I look up at the dark gray sky and realize that it will soon be monsoon season. The monsoon season in India typically lasts from June to September, which is when they receive 90 percent of the year's precipitation (Halpert). This flooding and subsequent drought have a great impact on the lives of the people who live here (Halpert). Due to climate change, there has also been a significant loss of biodiversity, meaning that

species that enrich the biological diversity are dying (Bhuiyan). The natives have told me the stories of the lost scale trees, which are recently extinct.

India is the most populous country in the world. That alone has an impact on the environment. Because of this large population, there is decreased access to water, which affects the climate as well (Cronin). There have also been significant effects on the aquaculture that is impacted by the large population, aquaculture being the life cycle of aquatic fish and plants (Bhuiyan). Fish are a main component in most Asian diets. This country is in danger of being destroyed, but also destroying itself. I am very worried about the people of India, and how their country can recover from such a harsh reality. On the next leg of my journey, I will be traveling to a significantly smaller country in the northern region of Asia.

### **Mongolia:**

I stand now in a deep valley surrounded by mountains with the occasional jutting tree. There are cattle roaming the green, and their owners' yurts can be seen for miles. Mongolia is very much a country of villages and farmers (Marin). However, the capital of Mongolia, Ulaanbaatar, has over 1 million residents (Population). This population increase in Mongolia is causing economic disparity, which is increasingly prevalent among the farming population, since most people choose to live in the cities. The Asian Pacific Journal of Public Health also notes an uptick in depression rates due to this disparity (Batbold). Government research in Ulaanbaatar has shown that by 2050 there will be a water scarcity due to the increased water usage (Dalai). This is the same

government, however, who does not have enough regulations in place to protect against these issues. The water that does fall as rain has quick evaporation rates, and, as it doesn't fall often, the amount of groundwater is also very low (Dalai). I feel an increased urgency for the farmers I have met facing these hardships. It is my hope for changes in water dispersion in order for more people to have better access to it.

### **Philippines:**

The last leg on this journey takes me to the islands of the Philippines. So far, it is proving to have the most beautiful sights. I am standing on the white sand beaches looking up at the rolling hills and out at the vibrant blue ocean water. This country also has unique pink sand beaches that are equally as beautiful. It has always been a dream of mine to see these beaches. There are also many impressive forests in sight, too, which are a main source of oxygen in this area (Lasco). Additionally, these forests are a large source of lumber for the islands. Because of this, the risk of deforestation is extreme (Lasco). This country also has several instances of heavy rainfall with monsoon potential. The trends calculated over several years show that, although there are monsoons, the number of days without rain is increasing every year (Cruz). This decrease in rainfall per year can also have an effect on agriculture (Cruz). This change in rainfall is also changing the overall temperature of the countries in Asia, which is dramatically increasing (Villafuerte). The Asian climate is relatively similar to the previously mentioned Asian countries, meaning that they are facing climate crises caused by dramatic rainfall, as well as increased temperature. The beauty of this

country greatly hides what lies underneath: deforestation, hydrology issues, and a dramatically increasing temperature.

**Reflections:**

Now, my Asian journey has concluded. Looking back at the time I spent there, I realized that, like the UK, these countries are in serious trouble. They are all plagued with climate disasters such as monsoons. The farmers in these countries are having increased environmental and ecological challenges each year as the climate continues to change. There are few changes in place to correct these issues, meaning these changes will become more dramatic. In the next leg of my journey, I will be traveling to countries in Africa to contrast what is happening in dryer, hotter countries. I look back at the photographs I took with the locals here in Asia and recall all the kind people who guided me around these countries. I am determined to find a way to help them by the end of this journey.

## References:

1. Bhuiyan, M, Jabeen, M, Zaman, K, Khan, A, Ahmad, J, Hishan, S. The Impact of Climate Change and Energy Resources on Biodiversity Loss: Evidence from a Panel of Selected Asian Countries. *Renewable Energy* **117**, 324-340 (2018).  
<https://doi.org/10.1016/j.renene.2017.10.054>
2. Cronin, A, Prakash, A, Priya, S, Coates, S. Water in India: Situation and Prospects. *Water Policy* **16**, 425-441 (2014)
3. Halpert, M, Bell, G. Climate Assessment of 1996. *Climate Prediction Center* (1996).  
[https://www.cpc.ncep.noaa.gov/products/assessments/assess\\_96/india.html#:~:text=Indian%20summer%20monsoon,of%20their%20total%20annual%20rainfall.](https://www.cpc.ncep.noaa.gov/products/assessments/assess_96/india.html#:~:text=Indian%20summer%20monsoon,of%20their%20total%20annual%20rainfall.)
4. Marin, A. Riders under storms: Contributions of nomadic herders' observations to analysing climate change in Mongolia. *Global Environmental Change* **20**, 162-176 (2010).
5. Population of Cities in Mongolia. *World Population Review*.  
<https://worldpopulationreview.com/countries/cities/mongolia>
6. Batbold, O, Pu, C. Disparities in Depression Status Among Different Industries in Transition Economy: A Cross-Sectional Study of Mongolia. *Asia Pacific Journal of Public Health* (2021).

7. Dalai, S, Dambaravjaa, O, Purevjav, G. Water Challenges in Ulaanbaatar, Mongolia. *Urban Drought*. 347-361 (2018).
8. Lasco, R, Pulhin, F. Forest Land Use Change in the Philippines and Climate Change Mitigation. *University of the Philippines* (1999).
9. Cruz, F.T, Narisma, G.T., Villafuerte, M.Q., Cheng Chua, K.U., Olaguera, L.M. A Climatological Analysis of the Southwest Monsoon Rainfall in the Philippines. *Atmospheric Research* **122**, 609-616 (2013).  
<https://doi.org/10.1016/j.atmosres.2012.06.010>
10. Villafuerte, M, Matsumoto, J, Kubota, H. Changes in extreme rainfall in the Philippines (1911–2010) linked to global mean temperature and ENSO. *Royal Meteorological Society* **35**, 2033-2044 (2014)

Bedford, F. (2022). Into the depths: Climate Change Part 2. *D.U.Quark*, Volume 6(Issue 1). Retrieved from <https://dsc.duq.edu/duquark/vol6/iss1/article6>