












Global disparity in environmental impact due to economic development


Ornwipa Thamsuwan


Dataset

<http://www.kaggle.com/worldbank/world-development-indicators/metadata>

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 World Bank • updated 3 years ago (Version 2)

World Development Indicators


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1344

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Metadata

 Feedback

Usage Information	License	World Bank Dataset Terms of Use 
	Visibility	 Public
Maintainers	Dataset owner	 World Bank
Updates	Expected update frequency	Not specified
	Last updated	2017-05-01
	Date created	2016-01-28
	Current version	Version 2

Motivation

Climate change is an undeniable fact and is likely caused by human activities, particularly GHG emission. Some of global warming's effect on human are events like floods, droughts and extreme temperatures.

It would be injustice... those who have to suffer from the consequences are not those who have caused it.

It is interesting to investigate if there are more CO₂ emission by industrialized countries but the impact on environment, particularly natural disasters, were more on developing countries.



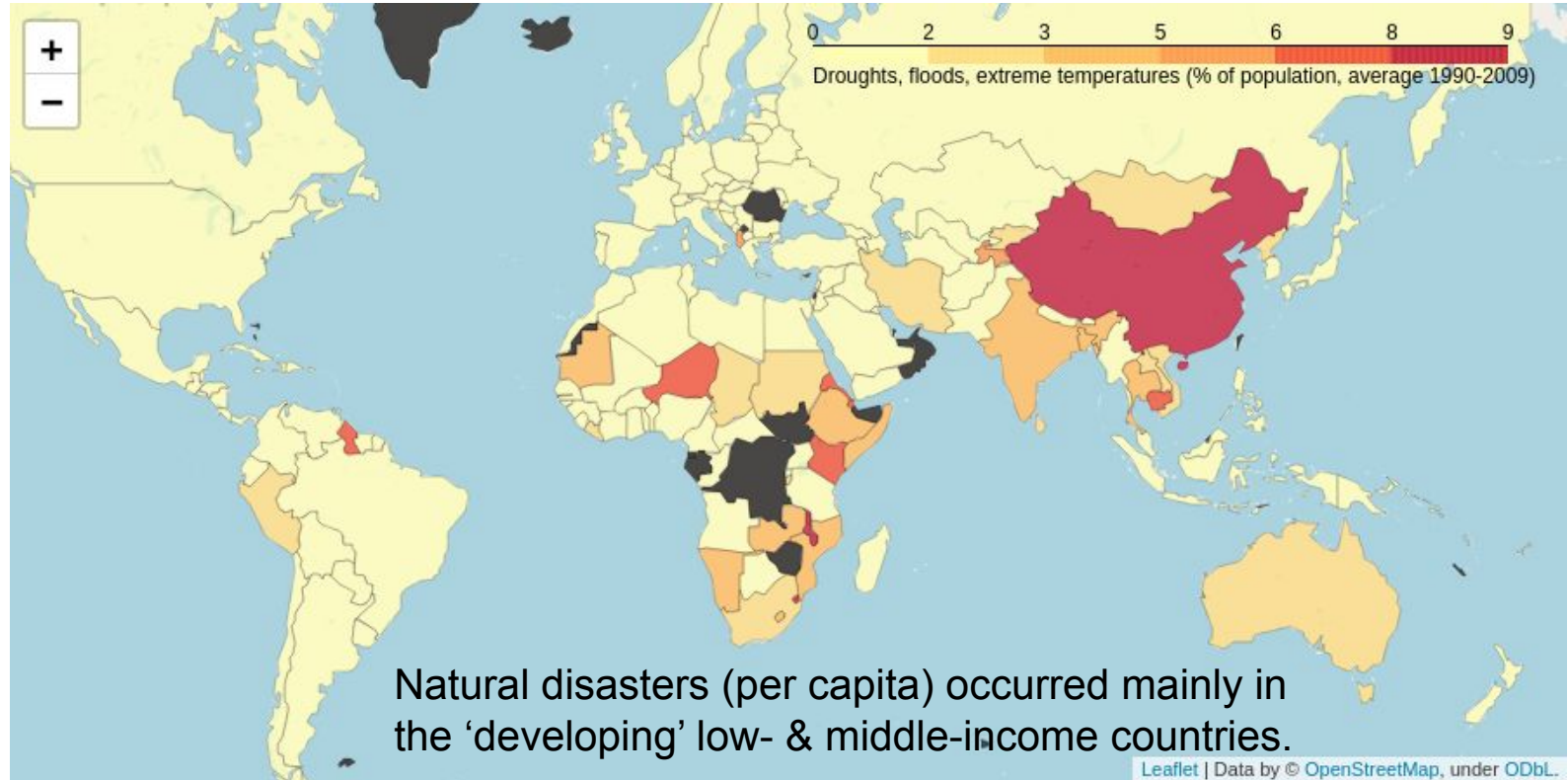
Research Questions

1. Which countries/regions are there the greatest concerns of natural disasters like floods, droughts and extreme temperatures?
2. How are historical CO₂ emissions correlated with the events of flood, drought and extreme temperature?
3. Is there a difference in the trend of CO₂ emissions over time among regions such as high income vs. low & middle income?

Finding - 1

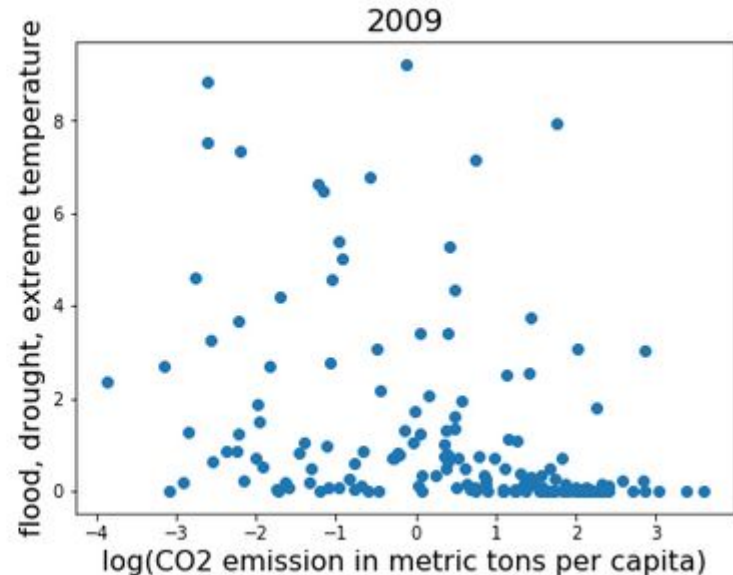
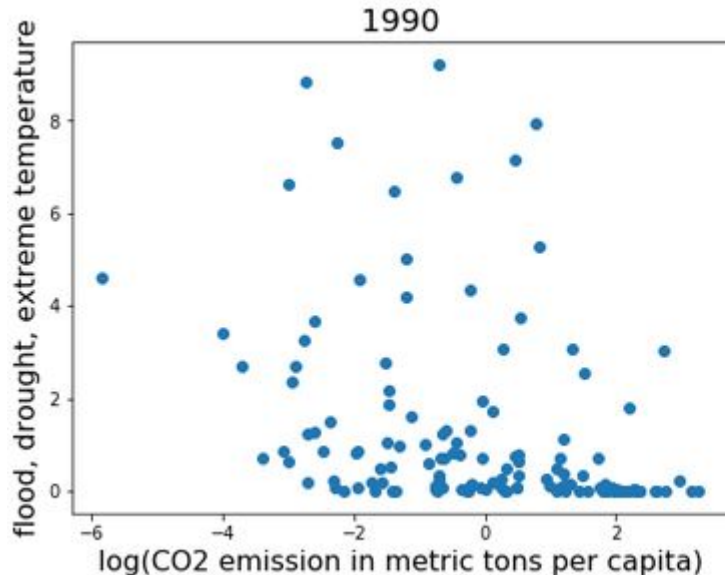
Countries
where
index > 5

- Swaziland
- Malawi
- China
- Niger
- Eritrea
- Guyana
- Djibouti
- Cambodia
- Kenya
- Tajikistan
- Albania
- Kiribati

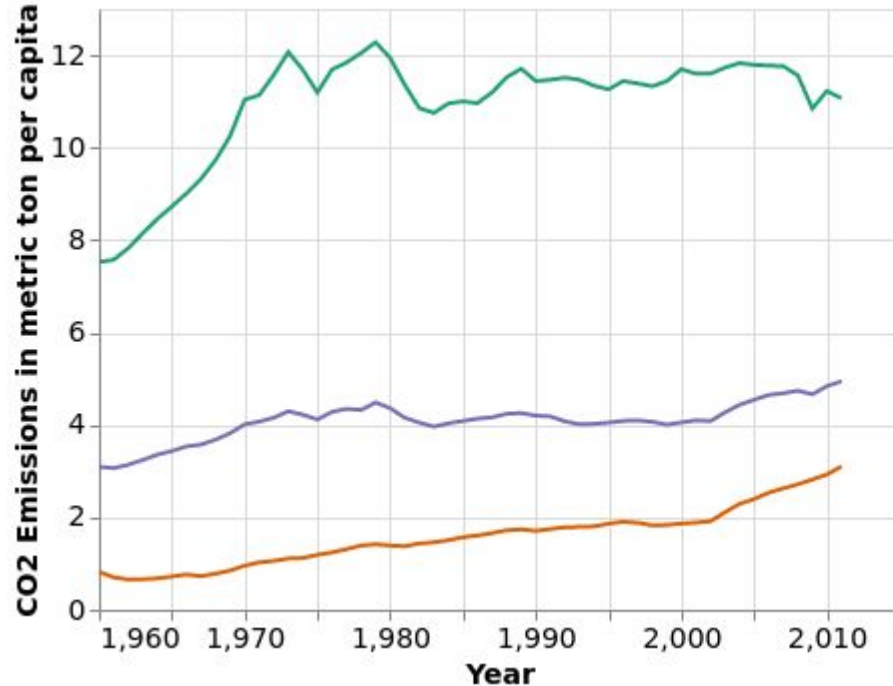


Finding - 2

The occurrences of floods, droughts and extreme temperatures in a country was not correlated with the countries' CO₂ emission (per capita) ... so the people impacted by the climate change are not necessarily the ones who caused it.



Finding - 3



Countries/Regions

— High income
— Low & middle income
— World

CO₂ emission by high-income countries were much higher than (approx. 3-5 times of) the emission by low- and middle-income countries.

In 1960s, CO₂ emission by high-income countries greatly increased and continued to maintain this high level.

Although CO₂ emission by low-and middle-income countries increased after 2000, the overall level is lower than the emission by high-income countries.

Acknowledgements

No other informal analysis was used.

No one provided feedback.

References

Motivation slide

- Background information
 - <https://climate.nasa.gov/evidence/>
- Image sources
 - <https://www.theguardian.com/world/2020/jun/29/over-1-million-people-affected-and-13-killed-by-indias-floods>
 - <https://www.theguardian.com/environment/2016/mar/16/drought-high-temperatures-el-nino-36m-people-africa-hunger>

Packages used

- Folium: <https://python-visualization.github.io/folium/>
- Altair: <https://altair-viz.github.io/>