# Extreme Rain in Colombia Santiago Mejia Forero

Colegio Anglo Colombiano, Bogota Colombia

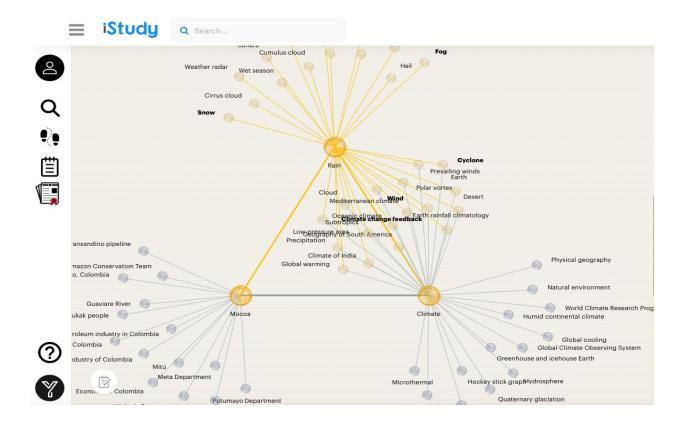
Climate change is a worldwide issue that has been getting worse as the years go by, and it has been creating different weather conditions that get to extremes. These are called extreme types of weather, and around the globe, various countries have been suffering from these extreme weathers. In Colombia, extreme types of weather are part of the daily life, and around this country, the most common type of extreme weather is extreme rain. This constant precipitation has been affecting various areas in Colombia, like Bogota, with floods on the streets and houses, leaving people homeless.

First of all, rainfall is normal in our planet. What is not normal is heavy or extreme rainfall. The amount of rainfall worldwide has been increasing as global warming increases. With this, it can be said that extreme rainfall is a consequence of global warming. As the planet gets warmer, more gases raise to the atmosphere and condense into bigger clouds, that release rain. The more gases that raise to the atmosphere, the bigger the clouds are, and the more rain they release. This is what causes extreme rainfall, and as the planet gets hotter and hotter, extreme rainfall will increase and increase.

Extreme rainfall can create damage everywhere around Colombia, and it also can create secondary events that can lead to massive destruction of towns or villages. In the mountains of Colombia, extreme rainfall can create landslides (secondary event), that in some cases, can reach different cities and destroy them to their totality. This was seen earlier this year, with the tragedy of Mocoa, a poor community located between two mountains in Colombia. With extreme rainfall all around Mocoa, landslide happened in the middle of the night, as a consequence of the rain, and it destroyed most of Mocoa. Also, because of the extreme precipitation, a river overflowed, and caused part of the destruction seen in this tragedy. Because of this event and many others, Colombia is constantly affected by extreme rainfall, and people are left without homes and families because of this.

Yewno Create Knowledge Map: Extreme Rain and Mocoa connection

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(Figure 1: Yewno Create Knowledge Map, 2018)



(Angela Dewan, 2017)

Besides the tragedy of Mocoa, other parts of Colombia have been affected by the phenomenon of extreme rainfall. Recent information from Colombia's National Risk Management Unit (UNGRD) has shown that since mid March of this year, 2017, eleven out of the thirty two departments of Colombia have been affected by extreme weather. "Overall, 55 municipalities have reported a total of 60 emergencies which have affected 1,396 families and left 12 people dead. The emergencies mostly include floods, heavy rain and landslides, but also thunderstorms and wind damage. Around 22 homes have been destroyed and another 565 have been affected by flooding." (Davies, 2017). This information shows that not only Mocoa has been affected by extreme rainfall and its secondary events in Colombia, and it shows that because of the floods caused by extreme rainfall, there have been emergencies reported, families left homeless, and 12 people dead in eleven departments.

Also, another part of Colombia, Manizales, has been affected by extreme rainfall. In Manizales, because of extreme rainfall, a landslide occurred, and left 16 dead people, and another 7 people missing. Also "The mayor of Manizales Jose Octavio Cardona said that a local weather station at Hospital de Caldas recorded 156.4 mm of rain in just 5 to 6 hours during the night, which is the same amount that normally accumulates in a month." (Davies, 2017). This shows that extreme rainfall is indeed happening, as the recorded data shows that the average rainfall of a month (730 hours in a month), has fallen in just 6 hours, which means that the rain is falling 121 times faster than normal.



(Davies, 2017).

These tragedies and disasters, are only a few of the many disasters that have happened in Colombia because of extreme rainfall and its secondary events. This is only in Colombia, and this country is not the only one affected by extreme rainfall. Many people are affected by this, in Colombia and worldwide, and we need to do something about it. We may not be able to stop extreme rainfall but we can do different things to reduce the amount of rainfall. As extreme rainfall is caused because of global warming, we can reduce the gases released to the atmosphere to stop heating the planet. Also, we can begin using renewable sources of energy, such as wind turbines or solar panels, which give us the same energy we need, without damaging the environment. We can build houses with better infrastructure that resists landslides and flooding, and we can build in strategic places where there is no major risk of landslides or flooding. Besides that, we can plant more plants and trees, which absorb part of the Co2 that goes to the atmosphere. There are many solutions to reduce global warming and extreme rainfall, but we have to act together to solve this issue, for us, and for the well being of humanity.

As mentioned before, Colombia indeed suffers from extreme rainfall, but not to a massive extend. Although rainfall is crucial for Colombia's diversity in plants and animals, when in extremes, rainfall damages plants, and destroys towns and villages. There have been many tragedies in Colombia due to extreme rainfall, but there are

other countries, such as the United States of America (massive floods happen in the US), Kenya, Indonesia, Niger and India suffer more from extreme rainfall.

## **Bibliography**

DAVIES, R.

Colombia – 11 Departments Hit by Heavy Rain, Floods and Landslides

In-text: (Davies, 2017)

Your Bibliography: Davies, R. (2017). *Colombia – 11 Departments Hit by Heavy Rain, Floods and Landslides. FloodList.* Retrieved 20 June 2017, from <u>http://floodlist.com/america/colombia-11-departments-floods-march-2017</u>

### DAVIES, R.

### Colombia – Landslides in Manizales Leave 16 Dead, 7 Missing | FloodList

In-text: (Davies, 2017)

Your Bibliography: Davies, R. (2017). *Colombia – Landslides in Manizales Leave* 16 Dead, 7 Missing | FloodList. Floodlist.com. Retrieved 20 June 2017, from <u>http://floodlist.com/america/colombia-landslides-flood-manizales-april-2017</u>