I. Introduction

A. Background information on climate change:

According to National Geographic, “climate change is the long-term alteration of temperature and typical weather patterns in a place”. Not to be confused with weather, climate change measures the changes in weather over long periods of time.

B. Importance of studying its global impacts

Understanding what climate change is and what causes it is of extreme importance for the survival of every living thing on this plant. The criticality of this area of study will not only impact the **environment**, but **society** and the **economy** as well.

C. Purpose and scope of the research

The aim of this project is to investigate the impacts of climate change around the world by analyzing historical data for six of the seven continental regions. Our analysis will focus on climate, water and forestry data accumulated during the 30 years between 1992 and 2021. It is our hope that with strong visualizations and an interactive website, we will present a strong case that compels users to make the necessary changes to decrease the rate of negative impact on the environment.

D. Thesis statement or research questions

1. Will we be able to identify the effects of climate-change around the world by analyzing water, land, and forestry data at the continental level only?

2. Do the climate changes affecting one continent affect other continents?

II. Literature Review

A. Overview of climate change and its causes

The scientific community has identified several causes of climate change, they include the burning of fossil fuels, deforestation, adverse agricultural processes, land use, waste management, refrigerants, transportation, energy production, livestock and animal management and human activities.

B. Key theories and concepts related to climate change impacts

Key scientific theories and concepts often discussed in relation to climate change are the Greenhouse Effect, the Paris Agreement, and the Carbon Budget. The greenhouse effect is fundamental to the study of climate science and is the inability of the sun’s heat to escape the earth’s atmosphere because of carbon dioxide, methane and water vapors which are also in the earth’s atmosphere but in large quantities. The Paris Agreement is an international treaty between the United Nations member countries to reduce greenhouse gas emissions and to limit the earth’s temperature increase to 1.5 degrees Celsius. The carbon budget is the maximum amount of carbon dioxide that is believed to keep the earth’s atmosphere at or below 1.5 degrees Celsius.

C. Current state of knowledge on direct impacts by continent (See individual Continent Pages)

D. Geographic and temporal scope of the study

As a team we decided to limit the scope of our research and analysis to six of the seven continents, excluding Antarctica. We will focus on the causes and impacts of climate change on Africa, Asia, Europe, North America, Oceania (aka Australia and New Zealand) and South America.

III. Direct Climate Change Impacts by Continent (See individual Continent Pages)

A. Socioeconomic consequences of direct climate change impacts

B. Government and community responses to mitigate and adapt to these impacts

C. Success stories and challenges in addressing climate change impacts

D. Emerging risks and vulnerabilities

VIII. Conclusion

IX. References

A. Cite all the sources and studies you've referred to in your research.

<https://education.nationalgeographic.org/resource/climate-change/>

<https://data.oecd.org>

X. Appendices (if necessary)

A. Additional data, maps, charts, or graphs