

Climate change in Pakistan: causes & consequences

The Essay "Outline"

1. Introduction
 - 1.1. Hook / Grabber
 - 1.2. General statement
 - 1.3. Thesis statement
2. Causes of climate change in Pakistan
 - 2.1. Rise in Human-led global warming
 - 2.1.1. Burning of fossil fuels such as oil & gas cause a large chunk of global emissions
 - 2.1.2. Manufacturing industries & Mining activities adds to the woes.
 - 2.2. Transportation sector is another major reason
 - 2.2.1. Evergrowing population and traffic on roads release huge amounts of carbon dioxide.
 - 2.2.2. Transportation such as trucks, ships & planes also run on fossil fuels.
 - 2.3. Deforestation roughly adds to the quarter of greenhouse emissions
 - 2.3.1. Cutting down trees for the sake of fuel
 - 2.3.2. Clearing out vast areas of vegetation worldwide for agriculture, urban & infrastructure development.
 - 2.3.3. Food production also leads to emissions of carbon dioxide, methane & other greenhouse gases.
 - 2.4. Emergence of El Niño phenomenon across the globe
 - 2.4.1. El Niño releases more heat into the atmosphere
 - 2.4.2. Results in warmer & wetter weather conditions along with heatwaves and tropical storms

3. Consequences of climate change in Pakistan

3.1. Rise in extreme weather events

3.1.1. Increasing temperatures across the country with intense heat waves in May - June

3.1.2. Heavy rainfall, catastrophic floods and severe droughts are becoming common.

3.1.3. Fast paced melting of glaciers is leading to rise in sea levels.

3.1.4. Disruption of the ecosystem is becoming inevitable

3.1.5. Pakistan's GDP to reduce by 18% to 20% in 2050 due to climate related events (WIB)

3.2. Economic consequences of climate change

3.2.1. Negative impact on agriculture, livestock & farming.

3.2.2. Hotter temperature increases energy demands

3.2.3. Variation in water supply due to declining glacial mass.

3.2.4. Reduced water availability for hydropower generation

3.2.5. ^{Heavy} Reconstruction costs are beyond the country's scope

3.3. Severe damage to transport & Urban sector

3.3.1. Increased stress on urban drainage system as a result of flash floods.

3.3.2. Heavy rainfall induced landslides rupture the road network.

3.3.3. Damage to sensitive government installations, residential & commercial properties.

3.3.4. Recent damage to Kaghan - Bridge due to floods.

4. ~~3.3.5.~~ Conclusion

Introduction

We are the first generation to feel the sting of climate change and we are the last who can do something about it (23rd Governor of Washington, Jay Inslee). In August 2022, torrential rains triggered the most devastating floods in Pakistan's history with over 33 million people affected by the flood waters. World Bank reported 1700 deaths and 12,000 injuries with economic losses & reconstruction in flood-hit areas of Pakistan in 2022 to be approximately \$40 billion. Pakistan as a state is already a climate vulnerable country given its geographical region where temperatures are already higher than the global average along with mostly arid & semi-arid land. However, Pakistan contributes less than 1% of the world's greenhouse gases & yet it remains the 5th most vulnerable country to climate change & faces the brunt of it with each passing year.