

Climate Change: Causes and Consequences

Outlines

1. Introduction

1.1 Hook

1.2 Background

1.3 Thesis Statement: Climate change poses one of the most significant threats to global sustainability, requiring immediate and collective action to reduce greenhouse gas emissions, transition to renewable energy sources, and adopt sustainable practices to mitigate its devastating impacts on ecosystems and human societies.

2. Climate change

2.1 Understanding the term climate change

2.2 Global Perspective

2.3 Pakistan Perspective

3. Causes of Climate change

3.1 Natural causes of climate change

3.1.1 Variations in solar radiations

3.1.2 Volcanic eruptions

3.1.3 Shifts in Earth's Orbit and axial tilt

3.1.4 Ocean currents

3.2 Anthropogenic (Human-induced) causes of climate change

3.2.1 Greenhouse Gas Emissions
• case study: burning of fossil fuels

3.2.2 Deforestation (cutting down forests)
3.2.2.1 Impact of Deforestation on climate change

- Loss of carbon sinks
- Increase Greenhouse Gas Emissions
- Disruption of climate Regulation.

3.2.3 Agriculture Practices contributing to climate change.

- case study: Greenhouse Gas Emissions, Soil Degradation, water usage

3.2.3.1 Impacts of climate change on Agriculture

- changing weather Patterns
- Increased Frequency of Extreme weather Events
- Shifts in Growing seasons.

3.2.4 Industrial Processes contributing to Climate change

- case study: cement production, steel production, chemical manufacturing

3.2.5 Rapid Urbanization

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4. Consequences of Climate Change

4.1 Environmental Consequences

4.1.1 Rising Sea levels

4.1.1.1 coastal erosion

4.1.1.2 Increased Flooding

• case study: 2022 flash floods in Pakistan

4.1.1.3 Melting of polar ice, glaciers and ice-sheets of Greenland

4.1.1.4 Salt water intrusion

4.1.2 Extreme Weather Events

4.1.2.1 Increased frequency and intensity of heatwaves

4.1.2.2 Droughts

4.1.2.3 Storms

4.1.3 Loss of Biodiversity

4.1.3.1 Extinction of Plant and animal Species

4.2 Social Consequences

4.2.1 Mass Migration of people

4.2.2 Food Insecurity

4.2.3 Vulnerable population

4.2.4 Education

4.3 Economic Consequences

4.3.1 Damage to infrastructure

4.3.2 Loss of productivity

4.3.3 Increased Health Care costs

4.4 Human Health consequences

Conclusion