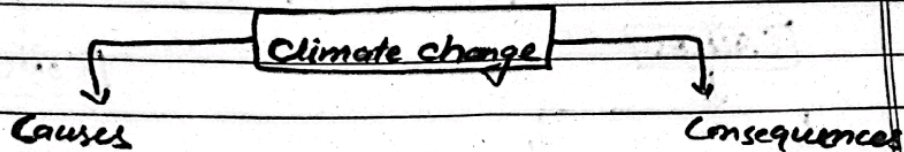


Topic

in Pakistan
Climate change: Causes and
Consequences.

Brainstorm

- | | |
|---|--|
| <ul style="list-style-type: none"> (1) Natural Causes (2) Human-driven Causes (3) Greenhouse Gas Emission (4) Deforestation (5) Industrial Agriculture (6) Industrial process (7) Transportation (8) Energy Production. | <ul style="list-style-type: none"> (1) Environmental Consequences (2) Social Consequences (3) Economic Consequences (4) Humanitarian Consequences (5) Conflict and Instability. |
|---|--|

DATE: ___/___/___

Outline

1. Introduction

2.1. Hook: "The earth has enough resources for everyone's need, but not enough for everyone's greed."

Mahatma
Gandhi

2.2. Background

2.3. Thesis Statement: Human-induced climate change, primarily caused by greenhouse gas emissions from fossil fuel burning and deforestation, is having far-reaching consequences, including rising sea levels, more extreme weather events and loss of biodiversity.

(2) Causes of Climate Change:

2.1. Natural causes:

2.1.1. Volcanic ~~Causes~~ Eruptions

2.1.2. Changes in Earth's orbit

2.1.3. Solar Radiation.

2.2. Human-driven causes

2.2.1. Greenhouse gas Emissions

2.2.2. CO₂ from fossil fuels

combustion, deforestation, industrial processes.

2.2.3. Methane from agriculture,

~~from~~ natural gas system.

2.2.4. Nitrous Oxide from agriculture
industrial processes and fossil fuel
combustion.

2.3 Deforestation and Land Use Changes:

2.3.2. Clearing forests for agriculture
urbanization, and logging

2.3.2. Reduction in Carbon Sinks
and biodiversity.

2.4. Industrial Process:

2.4.1. Release of fluorinated gases
and other potent greenhouse
gases.

2.4.2. Emissions from cement production
and industrial activities.

2.5. Transportation:

2.5.2. Emissions from vehicles, ships,
airplanes, burning fossil fuels.

2.5.2. Contribution to CO₂ and other
greenhouse gases emissions.

2.6. Agriculture:

2.6.2. livestock production contributing
to methane emissions.

2.6.2. Use of chemical fertilizers
contributing to N₂O emissions.

(3) Consequences:

3.2 Environmental Consequences:

3.2 Rising Sea levels:

3.2.1. Coastal erosion and flooding

3.2.2. Saltwater intrusion into
Fresh water Sources.

3.2.3. Loss of coastal ecosystem
and habitats.

3.2. Extreme weather Events:

3.2.1. Loss of biodiversity

3.2.2. Disrupted water cycle.

~~3.2.3.~~

3.3. Social Consequences:

3.3.1. Displacement and migration

3.3.2. Food insecurity

3.3.3. Health Impacts

3.3.4. Economic losses.

3.4. Economic Consequences:

3.4.1. Loss of Infrastructure

3.4.2. Impacts on Industries

3.4.3. Increased Health costs

3.4.4. Loss of productivity.

3.5. Humanitarian Consequences:

3.5.1. Vulnerable Populations

3.5.2. Human Rights

3.5.3. Conflict and Instability
(among States)

(4) Solutions:

4.2. Sectoral Solutions:

4.1.1. Agriculture, ^{Forestry} and other land uses.

4.1.2. Energy systems transition to renewable energy sources.

4.1.3. Industry: Electricity production processes, adopt new fuels and develop innovation in high-emission sectors.

4.1.4. Transport: switch to electric vehicles - promote public transit.

4.2. Technological Solutions:

4.2.1. Renewable energy

4.2.2. Electric Vehicles

4.2.3. Smart Grids.

4.2.4. Carbon capture and storage.

4.3. Nature-based Solutions:

4.3.1. Reforestation and Afforestation

4.3.2. Ecosystem Restoration

4.3.3. Sustainable Agriculture

4.4. Government and Community Solutions:

4.4.1. Invest in Renewable Energy

4.4.2. Carbon Pricing

4.4.3. Climate Adaptation plans

4.4.4. Community Engagement.

(5) Conclusion:

5.1 Thesis restated

5.2 Concluding thoughts.

The Essay

"The earth has enough resources for everyone's need but enough for everyone's greed." - Mahatma Gandhi

The United Nations Framework Convention on Climate Change (UNFCCC) defines climate change as "a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods."

Geological records ~~stretch~~ stretching back millions of years indicate some large variations in climate.

These have been caused by many natural factors, including the changes in the sun, volcanoes, earth's orbit and CO₂ levels. There is growing global ~~unanimous~~ consensus that climate change is humankind's greatest threat in modern times and is likely to have profound consequences for socio-economic sectors such as health, food production, energy, agriculture, consumption and security and natural resource management.