

Climate Change: Causes and Consequences

Outline:

1- Introduction

Definition of global warming

A threat to life existence

thesis statement

Causes of Climate Change

1. Greenhouse Gas Emission

- Burning of fossil fuels

(1.1% percent increase in emission from fossil fuels in 2023 compared to 2022:

Report by NASA Earth Observatory)

- Industrial process

(release of CO_2 , CFC_4 & Nitrous oxide)

- Transportation

(enhanced transportation leads to more release of gases to atmosphere.)

2- Deforestation

- Loss of carbon sinks
- Temperature increases impacting human health.

3- Industrialization and Urbanization

- Increased energy consumption (leading to more burning of fossil fuels ultimately releasing gases contributing to global warming)
- Expansion of infrastructure and consumerism.

4- Agriculture practices

- Use of synthetic fertilizers
- Livestock farming and methane production.

5- Pollution

- Release of gases from refrigerators and AC's leading to ozone depletion.
- Air pollution

Consequences of Climate Change

1. Environmental Impact

- Rising global temperature and heatwaves
- Melting glaciers
- Extreme weather events increased frequency (smog, floods, hurricane)

2. Impact on human health

- Respiratory problems.
(Lahore most polluted city: 3rd among countries: IQ Air report 2022)
- Infectious diseases (floods: vector borne disease in 2022 flood in Pak. ^{Sindh} ^{cares} 1951)

3. Economic Consequences:

- Effect on agriculture and food security (extreme weather and precipitation prevent crops from growing hence causing food insecurity.)
- Damage to Infrastructure
- Economic instability and burden on developing country.
(15.2 billion loss in 2022 flood: Center for Disaster Philanthropy)

4- Social and political Impact

- Migration and displacement (drought and rainfall patterns kill livestock by destroying crops, leading to massive displacement).
- Strain on health system (massive outbreaks of disease leading to shortage of medicine)

5- Impact on Biodiversity

- Loss of habitat and species extinction
- Marine life loses
- Disruption of Ecosystem

6 Conclusion

The Essay

~~Intro~~

According to NASA, the earth average temperature has been increased about 1 degree ~~Fah~~ Fahrenheit during the 20th century (Global Climate Change: Effects). Climate change refers to significant changes in global climate patterns, particularly the rise in global temperature posing a threat to human existence. It has become one of the most critical challenges of our time with far reaching implications for economy, environment and society. Climate change, driven primarily by human-induced gas emission, deforestation and industrialization is causing a profound impact on the environment, human health, ^{society} and economy, necessitating urgent calls to mitigate its effects for a sustainable future.