

CLIMATE CHANGE : CAUSES AND CONSEQUENCES

Outline

1. Introduction

- (a) Hook
- (b) Background
- (c) **Thesis Statement** Climate change is caused by shifts in temperature and weather patterns mostly due to human activities. These activities pose a serious threat to mankind because of rising temperatures, extreme weather conditions, sea level rise, ecosystem disruptions and human displacements along with impacting human health.

2. Causes of Climate change

- (a) **Burning fossil fuels**
 - (i) 68% of green house emission globally is due to the burning of coal, oil and gas.
 - (ii) Gases act as a blanket and trap the heat.
 - (iii) Global warming: sudden rise in temperature.

(b) Deforestation

- (i) Carbon release : Trees release CO_2 , cutting them down will release CO_2 in atmosphere ~~to~~ which is a potent green-house gas.
- (ii) loss of carbon sinks and disrupted water cycle

(c) Industrialization

- (i) Fossil fuel dependency and green house gas emission.
- (ii) Energy intensive sectors releases a lot of chemicals into the environment, through.
- (iii) The need for raw materials and space for factories lead to deforestation

(d) Natural causes

- (i) Volcanic eruptions : ^{when} due to volcanic gas, aerosols droplets and ash are released into the earth's stratosphere, leading to ozone depletion
- (ii) Shifting tectonic plates primarily changing land and Oceans.
- (iii) Varying solar radiations and orbital cycles such as Milankovitch cycles influencing ice ages and warm interglacial periods.

3. Consequences of climate change

(a) Environmental consequences

- (i) Extreme weather conditions such as sudden heatwaves, droughts, floods and heavy rainfall

(ii) Sea level rise and oceans due to melting glaciers and ice sheets.

(iii) Land degradation which leads to soil erosion and quality decline along with desertification.

(iv) Ecosystem and wildlife is disrupted due to the changing climate.

(v) Disrupted rainfalls have reduced the fresh water supplies primarily increasing water scarcity.

(b) Human and societal consequences

(i) Human health is affected due to water-borne infectious diseases, heat waves and worst air quality e.g. smog.

(ii) Human displacements and conflicts.

(iii) Food and water security due to reduced crop yields, chemically polluted water and marine life disruptions ^{leading to} ~~e.g.~~ fisheries, failure.

(iv) Economic crisis due to infrastructure destruction by floods, impacts on agriculture, forestry and fisheries and increased costs for disaster recovery.

4. Conclusion