

Climate Change

- 1) Introduction
- 2) Thesis statement: Climate change is a pressing challenge of today, however, multiple factors are contributing to it and must be addressed through effective measures.
- 3) Factors contributing to Climate change

3a) Burning of fossil fuels increases the amounts of greenhouse gases

(i) CO₂, Methane and Nitrous oxide increase from approximately 280 ppm to 419 ppm, 722 ppb to 1922 ppb and 270 ppb to 337 ppb in 18th century to 2023.

3b) Deforestation leads to the removal of trees, which serve as natural absorbers of CO₂.

(i) Canada's boreal forest

3c) Intensive Farming adds up the amount of methane gas & nitrous oxide in atmosphere

(i) Methane is 30 times more powerful than CO₂

3d) Depletion of ozone layer

results in change of climate

(i) Ozone hole in Antarctica

3f) Natural disaster volcanic eruption exacerbates the global temperature

(i) Eruption in Krakatoa

Tambora "the year without a summer"

3g) Explosion of nuclear weapons cause short-term change in climate

(i) Atomic bombs in Hiroshima and Nagasaki

3h) Plastic that we use in daily life generates harmful gases

(i) Just 9% of world's plastic is recycled : World bank

3i) Landfills contribute to climate change at the cost of preservation from pollution

(i) 1119.8 metric tons of methane released from landfills : (EPA)

4) Implications of Climate Change

4a) Global warming is an outcome of increase level of greenhouse gases
(i) (In 2024: Asia warm twice than the global pace: WMO)

4b) Glaciers are thawing at faster pace leading to rise in sea level
(i) (Arctic permafrost)

4c) Climate change effects society by exacerbating existing society and economic inequalities.
(GCP Report)

4d) Climate change poses significant threat to human health worldwide
(i) study published by Greenpeace Netherlands

4e) Extensive wildfire due to climate change leads to the loss of biodiversity.
(i) Catastrophic Australian bushfires in 2019/2020

4f) The Economy is suffering as a result of unpredictable changes in climate pattern
(i) (Swat flood 2022)

4h) World is facing extreme weather events
(i) High rainfall, hurricanes, cyclones

4i) Climate change poses a threat to food security
(i) Tuna Ocean

4j) Climate change poses a threat to water security
(i) Water scarcity in African states

4k) Ancient historical buildings are vulnerable to climate change
(i) Indus Valley Civilization, Taj Mahal

5) Ways To Combat Climate Change

5a) Integrate climate change into policies and planning
(i) Earth Summit & Kyoto Protocol (1992, 1997, 2014)

5b) Reduction of fossil fuels lead to lessen the amount of CO_2 , methane, nitrous oxide

(i) Moji Petroleum, Moji Engines Limited joined the oil and gas decarbonization charter

5b) Forests are source of carbon dioxide absorption

(i) 2001-2021: Amazon forests remove 340 million tonnes of CO₂ from the atmosphere each year, equivalent to UK annual fossil fuel emissions.

5c) Shifting from Non-renewable to renewable sources of energy

(i) Solar, wind, energy, hydropower, geothermal

5d) 3R method should be used for Plastics

(Reduce, Reuse, Recycle)

5f) Used low-carbon emission vehicles for transportation

(i) electric vehicle

Conclusion??

"It is not climate change that needs to be tackled. It is the political power of the fossil fuel industry." Climate change poses serious existential threat across the globe. Nature has played a minor role, it is human activities that pollutes the atmosphere with harmful gases. Fossil fuels are the main drivers of changing climate patterns in recent decades. The greenhouse gases are released from burning of fossil fuels in industry, vehicles and nuclear power house. The greenhouse gases include carbon dioxide, methane and nitrous oxide etc. Forests are carbon sinks but deforestation exacerbates more carbon dioxide in atmosphere rather than lessens it. All human activities like agriculture, use of plastic, nuclear weapon explosion and landfill are factors that contributes to increase the amount of harmful gases. These gases traps the heat of sunlight leading to

increase of Earth's temperature.

Naturally occurring volcanic

eruption alters the Earth's

climate in very small

amount. Climate change

has seriously impacted

all human living things. Global

warming is the consequence

of greenhouse gases. ~~These~~ Owing

to global warming, the

glaciers are thawing at

greater rate. The melting

of ice rises the sea

level. This has negative impact

on all living things. ~~Due~~

to this, human has been

suffer. Wildfires and extreme

weather events disturb the

seasonal patterns and this also

poses threat to food and

water security of creatures.

However, there are many

agents which aid in

combat of climate change.

The variety of policies have

been planned to decrease

the amount of greenhouse

gases. More trees are planted

and traditional energy has

been shifting to renewable

energy. Recycle method should

be used. Hence, there

are many factors which are responsible for changing in climate patterns and it has adversely impacted on all living things. However, there are some solutions to address the climate change.

Points are okay
Adopt formal language
Grammatical errors
Work on paper presentation
Avoid cutting in Introduction
Bring coherence in your points