

Global Warming: Challenges And ways for Mitigation

Outline

1 Introduction

2 Challenges of Global warming

a) Environmental challenges of Global warming

i) Global Ice loss (melting of Glaciers)

An IPCC National Commission on Ice and Snow III. Glaciers retreated observed in Newzealand.

ii) Rising Global sea level

About 8 inches global sea level has been raised over past century

iii) Threat to Coastal Population

About 2.5 billion population lives on coastal areas

iv) Increasing Intensity and frequency of disasters

According to the world Index of Risk 2024 report, Pakistan has been listed among 15 countries with in the highest disaster risk.

b) Agricultural Challenges of Global Warming

Pakistan's 40% Population depend on agriculture.

i) Changes in Soil Quality and Fertility

The IPCC report highlights that soil temperature will increase by 1.5°C by 2050, affecting soil fertility, microbial activity and plant growth.

ii) Agricultural Loss

PM of Pakistan in 2020 quoted, "Pakistan is facing wheat shortage."

iii) Increasing Temperature - changes in life cycle of crops.

c) Social Challenges of Global Warming

i) Health Impacts

As per WHO 3.5% dengue, 8% malaria and 3% typhoid cases are contributed by ~~clim~~ Global warming.

ii) Displacement and Migration

According to UNHCR 2020, increased frequency and intensity of natural disasters are forcing people to flee their homes.

iii) Food Insecurity.

1-1-2021

d) Economic Challenges of Global warming

- i) Infrastructure damage
- ii) Reduced GDP
- iii) Increased healthcare costs.
- iv) Loss of Tourism and Industries

e) Political challenges of Global warming

- i) Increasing conflicts between the states
 - ↳ Hydropolitics between Indo-PAK
- ii) Increasing conflicts within the states
- Environmental degradation and competition for resources have fueled tensions between locals and government of Nigeria.
- iii) Issues between developed and developing world.

Cop28 - climate finance contributed to increase tensions between developed and developing countries.

f) Cultural challenges of Global warming

- i) Disturbance in routine life
- ii) work from home
- iii) Schools closing

3) Ways for Mitigation of Global Warming

a) Reducing the level of Green House Gases:

i) Decarbonization

↳ Transition of non-renewable energy to renewable energy

b) Increasing global forest cover

Pakistan forest is less than 5% and it should be 25% as per international forum.

c) Promotion of sustainable Transport

d) Promotion of sustainable urbanization sponge cities

e) Environmental Education

f) strengthening the role of environmental institutions

Ex

PAK-EPA (Environmental Protection Agency)

g) Strengthening disaster risk management

h) Improving international cooperation

4) Conclusion