

(2) Climate change: Global crises in 21st century.

Outline

(1) → Introduction.

(2) → Climate change is a global crises in 21st century.

(3) Climate change is posing significant no of threats.

(3.1) → Unprecedented floods.

→ UNCHA report → 2022 floods in Pakistan, Australia, Bangladesh, India.

(3.2) → Extreme heatwaves and Wildfires

→ Environmental agency of Europe → 61,000 people died due to heatwaves.

(3.3) → Yearly increasing temperature.

→ IPCC report (2023) → catastrophic effects

of climate change, if temp goes exceed beyond 1.5°C.

(3.4) → Water scarcity and food insecurity

are prevalent threats due to climate change.

NIDMA report → Due to glacier melting and

rising sea level, the water bodies are getting sicker.

(3.4) → Vulnerability for diseases is increasing as the horrible effect of climate change.

WHO report 2023 → Heatwaves are causing cardiovascular problems, floods are causing other waterborne and vector-borne diseases like cholera, dengue etc.

(4) Major Takeaways in recent COPs taken by World leaders

(4.1) → COP 27: establishment of loss and damage fund.

o → Initially decided \$100 bn by developed countries.

(4.2) → COP 28: Bonn Agreement.

o → Efforts for eco-revolution and transition to renewable energy resources.

(4.3) → COP 29: Revised the roles and plans of NDCs and operationalization of loss and damage funds.

(5) How can we protect our planet?

(5.1) → Energy shift from non-renewable to renewable energy resources
e.g. Solar panels, wind power windmills

and dampen reliance on solar panels.

(5.2) → countries should initiate water management programmes.

(5.3) → Adopt environment-friendly transportation.

→ Electric vehicles.

(5.4) → Climate-resilient agriculture practices to prevent food insecurity.

(5.5) → Assume efficient waste-management practices.

(6) → Climate change is a cornerstone agenda in Pakistan's national policy.

(7) Conclusion.

Climate change is no more threat now, but it becomes a reality of 21st century. Its hawks are now prevailing in every corner of the world. Berry Burek, international community's scholar, has comprehensively given the thesis about the world is facing a lot of non-traditional threats to like environmental security with traditional threat, so the world and global powers have to pay an attention also on non-traditional threats to address the existential dangers. Climate change, as an environmental insecurity, is posing a lot of threats to the existential needs of humans, including unprecedented floods in 2022, extreme heat waves, and wildfires, yearly increasing temperature range of earth, and most dangerous one water scarcity and food insecurity. The world has needed to take effective measure to address this crises, like: transition toward renewable energy resources,

Embrace the environment friendly transportation, efficient waste management initiatives and assume effective waste management practices. Therefore, the strong will of all global leaders is necessary to address this existential danger. Although, the climate changes' adverse impact on world as it is evidenced by unprecedented floods, extreme heatwaves, and severe water and food insecurity require the efficient measures and strong will of global leaders as demonstrated by the annually meetings of conference of all parties.

Climate change has emerged as the global crisis in 21st century. This change is impacting world's economy, health system and other valuable resources which are existential needs of humans. In 2022, shocking floods in different countries like Australia, Pakistan, India and

Bangladesh has wreaked havoc in human lives. Similarly, extreme wildfires in California in 2023 due to heatwave series is significant even regarding the climate change destructions.

Moreover, according to European environmental agency, 81000 people died in Europe due to heatwaves. Therefore, the collective

efforts of world powers are needed to address and mitigate this 21st century crisis before it goes beyond the control.

Climate change is posing significant challenges to present world scenario. The one of the devastating threat is ground-breaking floods.

The changing weather patterns due to climate change caused to glaciers melting, thereby increasing sea level leads to horrible epoch-making floods. This overflow of water in short term leads to water

scarcity in long run, which further leads to loss of biodiversity.

According to Australian Bureau of Meteorology, 2022 flood caused \$22 billion economically loss and 25,000 fatalities in country. Similarly, 2022 floods in Pakistan, was ^{one of} the deadliest events of history, which caused \$33 bn loss economically and 30 million people displaced due to submergence of houses.

In addition to this, heatwaves and wildfires are another noticeable threats of climate change. Severe heatwaves in California caused horrible wildfires in 2023. According to Environmental agency of Europe, 61,000 people died due to heatwaves and wildfires in 2023. Likewise, the wildfires in Canada in 2022 are also cause of extreme weather patterns and heatwaves. These heatwaves are not just causing wildfires, but they are posing

serious health problems in humans like cardiovascular problems, high mortality rates in women etc. This is also affecting crop's yield rate and shrinking water bodies due to the process of evaporation. Furthermore, the yearly increasing temperature is another major risk posing by climate change crises.

In 2024, Pakistan's archaeological site Mohenjo Daro experienced

53°C record breaking temperature.

In similar fashion, the increasing temperature of Sub-Saharan African countries is alarming thing for obvious.

According to United-governmental panel on climate change, IPCC, report 2023, catastrophic effects of climate change will occur, if temperature goes beyond the 1.5°C .

Additionally, water security and food insecurity are prevalent threats, posing by climate change crises.

It is due to floods and extreme heatwaves, the waterbodies are getting situated,

which indirectly leads to food insecurity. According to world bank report 2023,

The 2001 fresh water is declining per year. In similar manner, due to water scarcity and soil-degradation.

The crop's yield is increasingly declining.

In most of places, farmers wasted

Their crops according to time range

insecrec of volume range of crops,

which further exacerbate the water

scarcity and thereby food insecurity

is prevalent as the existential

threat. According to Agriculture

department of UNCT, in 2022,

3 billion people faced food hunger

which alarms ~~them~~ about humanitarian

crises.

Correspondingly, vulnerability for

diseases is also increasing as the

harmful effect of climate change

crises. According to scientific

experts, due to floods no of

chances of waterborne and vector borne diseases has increased.

According to World Health Organisation, WHO report 2023, heatwaves are causing cardiovascular problems.

and high mortality rates in women. In this series, gender

climate violence has also increased as it is evidence by the 2022 floods in Pakistan has more appeared in women and children.

In similar manner, displacement of women due to climate threat

made them more vulnerable to violence.

World leaders has always come together, when the world is facing horrible crises like

21st century climate change crises as it is exemplified by the event from Congress of Vienna in 1815.

To the conference of all parties

in 1995. Therefore, to address the challenges and above mentioned

Date:

Effects of climate change raised,
the COP conference of all parties
was established in 1992 at the
Rio de Janeiro. This first meeting of
COP was convened in 1995 to address
the challenges ^{were} posing by ^{environmental} climate
changes. This COP meeting was convened
annually by the global leaders under
the United Nations ~~framework~~
Convention on Climate Change,
UNFCCC, to address the time-present
challenges released to environment
and take major measures to mitigate
the effects of environmental degradation.
In these events, except 27 COP in
2022 has taken the major measure
strategy by establishing the loss
and damage funds to parity the
devastating by flood developing
countries.

Similarly, in 2023, COP 28 in
UAE another significant meeting
of world leaders, which emphasizes
the global leaders to collaborate

on transition toward renewable energy and made collective effort for environmental protection by agroforestation and plantation drive. The ~~tree~~ ten billion Tree ^{international} ~~International~~ project was appreciated at ~~world~~ level and demonstrate it as exemplary model for world. In this way, Tree billion campaign initiated under the United Nation decade for environmental protection.

Furthermore, the recent COP 29 in 2024 in Baku, Azerbaijan, has significantly taken major steps to address this issue. The major and notable measures taken by this gathering are the operationalization of loss and damage funds. There was established in 2022. Another measure was to renegotiate plans of NDCs under the state take process.

Climate finance remains the note-worthy discussion in this party conference.

The developed countries pledged \$100 billion annually to parity the developing countries, but the developing countries walked out from the conference as considering the global north pledge insult and humiliation for themselves.

After the deadlock of two days, the developed countries have pledged for \$300 billion annually by 2035, which ~~was~~ is also far less than the demanding amount \$1.3 trillion by developing countries.

Other important discussion about carbon credit trading and gender-climate justice was also negotiated in COP 29. However, there was no deal and binding treaty signed to phase out the fossil fuels due to the economic concerns of Azerbaijan and China.

Besides these party conferences, gatherings, and formalized agreements, it is necessary

(Individual)

for every country to take measures to mitigate the dangerous and peril threats of environmental climate changes. First of all, all the countries have to shift their energy resources from the non-renewable to renewable energy chunks. Because, emission of CO₂ and other polluting gas from the burning of fossil fuel and coal are playing major role in polluting the environment and in changing weather patterns.

Therefore, countries must have to prefer the cheap renewable energy as compared to polluting expensive non-renewable energy practices. In 2024, Pakistan became the ~~the~~ second world largest importer of solar-panels from China, which reflect the countries priorities ^{exports} to keep the environment pure and safe.

In some cases, Pakistan's project like Quaid-e-Azam solar park and, Jhimpir wind corridor.

are reflecting the broader strategy of Pakistan under the commitments to international agreements.

Likewise, countries should develop water management programmes to secure the water resources and the aquaculture and human biodiversity. Countries like Australia have drip-irrigation model for agricultural practices, which should every country follow and prevent the water wasting methods.

Pakistan's recently water resources management programme is aimed to water-preserve practices like drip-irrigation, spray-sprinkling irrigation methods to ensure water preserving. Similarly,

The world largest dam, The George dam of China is also

reflecting country's strategy to preserve water resources.

Thirdly, countries should adopt environment-friendly transportation like electric vehicles, e-bikes and cycling etc. The smoke from car-engines; and bus-transport usually contains significant amounts of CO₂ and other poisonous and unhealthy gases, which contaminate the air. The recent boom in EVs industry of China and the larger exports of these EVs is commendable since it is mitigate climate change adverse effects.

On the same note, countries should not pay less attention on climate-relevant agriculture practices to prevent food insecurity, which is existential need of humans. Climate-smart-crops is significant step taken by the Vietnam and other third

The Third world countries are.

The most affected nations due to this crisis, which is point to ponder for rich countries

for the approach men of climate justice and equity. However,

Pakistan is also one of the third countries, which contribute

10% globally, but faces severe impacts of climate change.

Pakistan is suffering economic instability, but still the climate change has recognized as the cornerstone agenda of Pakistan's National policy as it is.

Illustrated by Pakistani climate change Act 2017,

establishment of eco-resilient fund, Marin projected area initiative etc.

The 21st century crises is ~~the~~

become more dangerous than

ever as its ^{demonstrated by} prevalent world'

deviations, So countries

world countries. countries should cultivate those crops which are climate and drought-resilient according to ^{local} weather patterns, as it is necessary to prevent the world from other non-traditional security threats like economic loss, social loss, and environmental loss.

Similarly, countries should also pay a handsome attention on assuming efficient waste-management waste-management practices to secure the ecosystem and to prevent loss of biodiversity.

The waste should be decomposed in healthy scientific manner, which is climate resilient method for adoption.

Climate change is ~~the~~ ^{causes} very biased on its effects, as the developed countries like USA, UK and China are contributing more in climate pollution, but

must have to take the proper practical actions with strong will rather than just the farceology. Because this environmental security is now become the existential threat for planet earth, which is necessary to address as before it goes beyond the hands which is full-scale destruction of world.