

Q2.

Introduction.

Pakistan is in state of turmoil when it comes to climate change and its various impacts particularly in the form of air pollution & bad air quality. The country is engulfed with the menace of bad and serious deteriorated air quality mainly due to greater emission of GHG, deforestation and many others. It has affected the every aspect of both individuals and states. From health to economy, no sector is devoid of its negative repercussions. The need is to take some robust steps mainly in form of promoting forestation, shifting towards renewable energy resource and inter alia.

2. Deteriorated Air Quality.

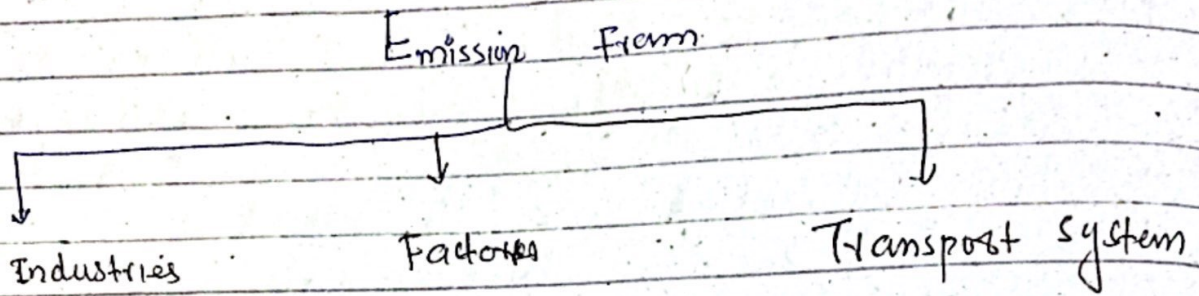
The worst situation of Air quality has been highlighted by various international organization and reports.

According to Air Index quality report, Lahore and Karachi come at 2nd and 3rd respectively in terms of bad air quality.

This phenomenon has been exacerbated by so many factors.

3. Factors behind deteriorated Air quality in Pakistan.

3.1 Increased amount of GHG in the atmosphere results in bad air quality.



These sectors emit toxic gases into atmosphere, thereby leading into a polluted environment. This makes the air quality bad in Pakistan.

For Example: Gases like CH_4 , CO_2 , NO_x etc in the atmosphere, when mix with oxygen results the deteriorated air quality.

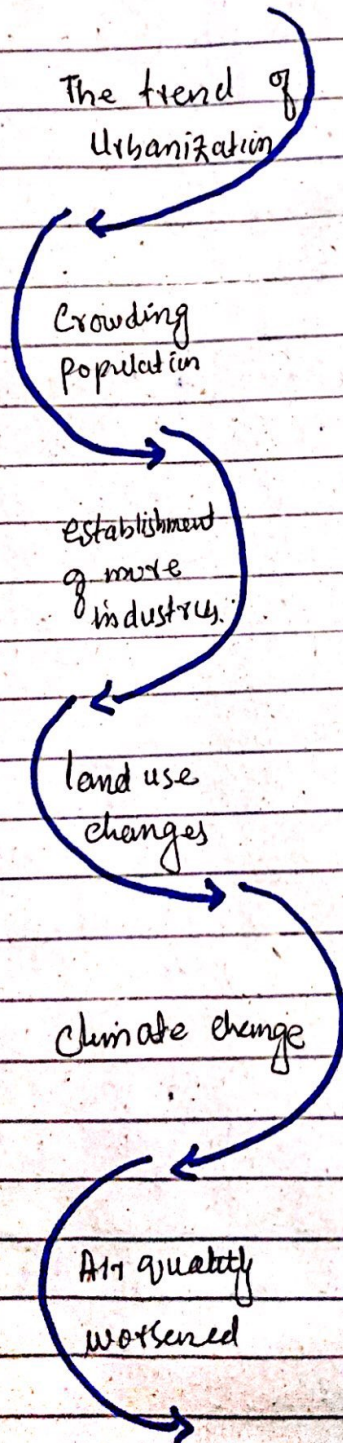
3.2 Deforestation

Trees are carbon sinks but chopping down trees in Pakistan has gained momentum.

According to the report of climate change Ministry report the country only covers 4.5% of the land & it requires almost 33%.

3.3 Urbanization and increasing land use changes.

In case of Pakistan the trend of urbanization is leading to the establishment of unsustainable cities.



3.4 No use of technology at industrial level to capture and store carbon at beginning level.

In case of Pakistan, the culture of carbon sequestration in industries is still a pipedream. What it has created is that it allowed the industries to emit GHGs to atmosphere as they can.

4. Effects of deteriorated Air quality on both individual & environment.

4.1. It exacerbates health-related concerns: Respiratory disease, heart diseases.

When the bad air is inhaled it threatens the not only the health of people but also leads to death in the long run.

For example:

According to a report of Ministry of climate change and health, 4.8% of annual death in the country may be attributed to respiratory disease and lung cancers.

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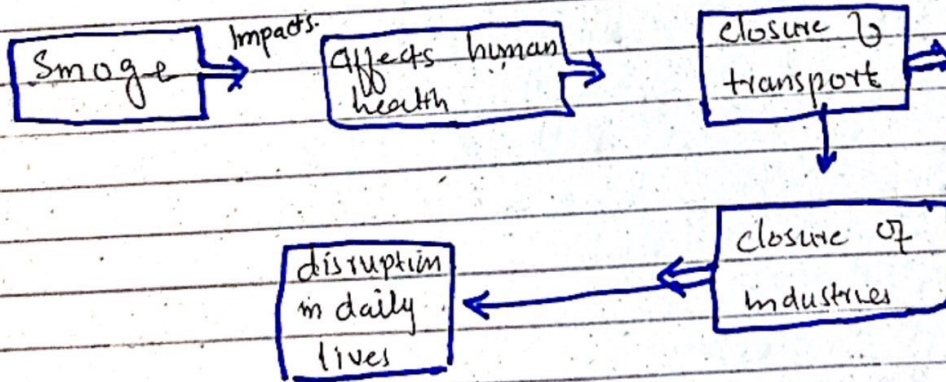
4.2 It reduces living standard of people.

Standard in Pakistan is at its lowest ebb due to many reasons. Bad air quality is amongst the major reason. Comparison:

The life standard in Norway or any Scandinavian state is higher than Pakistan because the former has fresh and clean air while the latter has bad air quality.

4.3 It multiplies the phenomenon of smog.

The smog-combination of smoke and fog also increases with bad air quality which has far reaching implications.



4.4. Air quality affects natural aesthetic and beauty of the ecosystem.

The natural beauty and lushy-green environment

is affected from bad air quality. It carries immense importance in terms of tourism and other economic dividends for the state.

4.5 Bad air quality Fortifies Biodiversity losses.

The natural habitat get change with the increase of air pollution. Many species get die, other becomes migrate and eventually loss their survival. This ultimately results biodiversity loss of the ecosystem.

5. Measures to cope with the bad air quality.

S1. Fostering the culture of reforestation and afforestation is mandatory.

More and more trees are to be planted in this regard. Projects like Billion Trees Tsunami and Green Pakistan Initiative must be implemented across the country.

S2. Installing Carbon Sequestering and Storage Mechanism at Industrial level is

badly needed.

The carbon emission must be controlled at the beginning. The government needs to install the method of Sequestration at the level, particularly at those industrial industries which are based on Fossil fuel.

5.3 Shifting towards Renewable energy resources is necessary for putting lid on the air pollution.

Pakistan must explore the untapped potential of renewable energy. The country has wind, solar, geothermal and many others form of renewable energy resources. The renewable energy will give:

- Sustainable development
- Curb the air pollution

5.4 Promoting E-vehicle and public transport system particularly in major cities.

There is a need of transition towards electronic vehicles. For that the country must establish a robust level of cooperation with developed countries plus with china in order to promote this adventure.

Conclusion.

In short, Pakistan is in a serious crisis in terms of worst air quality. The country needs to realize the sensitivity of matter & must adopt strategies in order to cope with them.

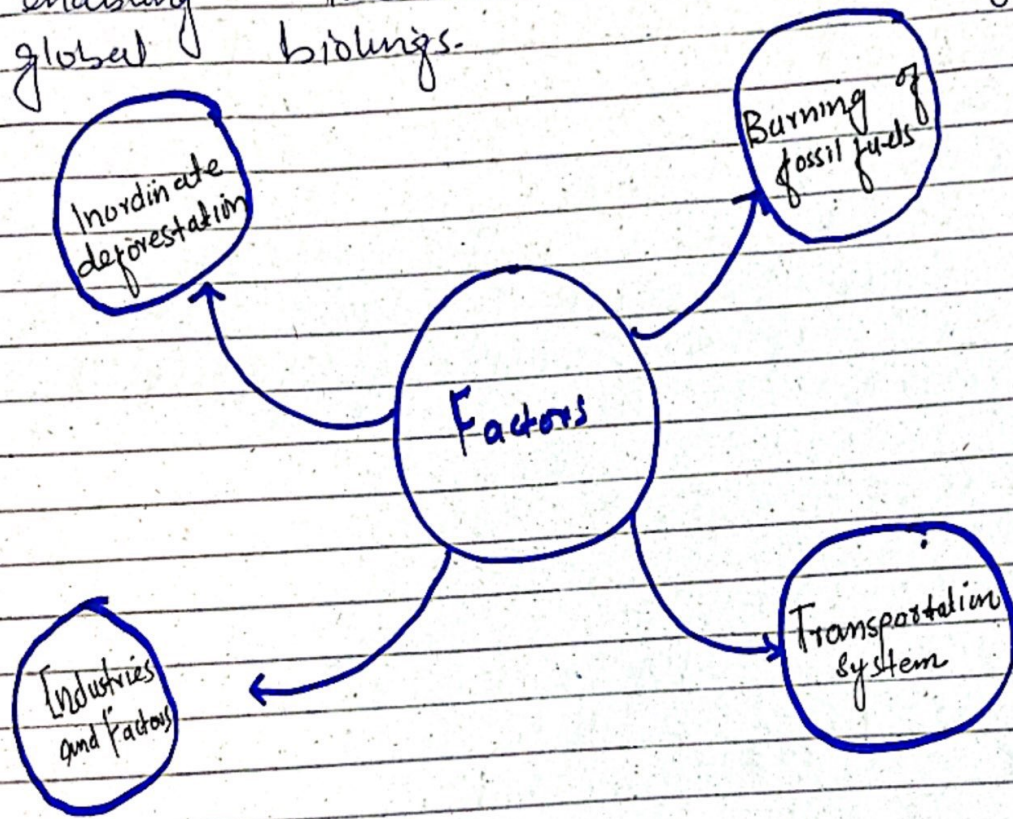
Q4

Introduction

The global level temperature and its scourages in various forms have been extended to the level that has transformed the era of global warming into a "global boiling". The increasing emission of GHGs, trapping of more intense heat and many others have made the atmosphere warmer than ever before. Its manifestations can be seen in rising sea level, inundation of territories, melting of glaciers, recurring heat waves and many others. The need of the hour is the global community must put lid on the emission of green house gases by shifting toward renewable energy resource, increasing forestation, carbon sequestration and many others.

Factors that have transformed the era of global warming into an era of global biolning.

The temperature of earth has been increasing with the faster rate than ever before, enabling the landmass of global biolnings.



These factors: Inordinate deforestation and increasing level of GHGs due to transport system, industries and factories are altering the very nature of planet. It is posing severe threat to the survival of humans life and other species.

3. Manifestations of the 'biding' age.

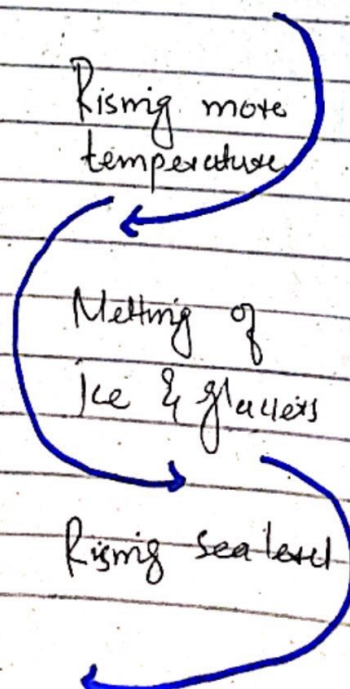
3.1. Increasing the temperature of the earth's surface

The global temperature of the earth's surface is exponentially increasing thereby leading to the rise of an era of global 'biding'.

For Example: According to the Economist Magazine Report "The 2023 was recorded as the warmest year since industrial revolution".

3.2 Rising sea level due to increasing temperature

The sea level has been rising with an increasing due to the rise in global temperature.



3.3 Melting of glaciers around the world.

The glaciers are melting with faster phase which indicate the era of global warming.

For Example;

The increasing and rapid decline in number of glaciers in Pakistan is a case in point.

3.4 Recurring heatwave around the world.

There is a considerable level of increase in the occurrence of heatwaves around the world. These menace is mainly due to increase of GHGs in atmosphere which led to era of global warming.

For Example; According to Economist report, the Europe has faced the hottest and highest number of heatwave in year 2023 since Industrial Revolution.

3.5 Prolonged drought coupled with erratic Monsoon also manifest an era of global warming.

The unexpected pattern of rainfall along with the

resultant drought has transformed the era into a global biology age.

For Example: The drought in Sub-Saharan Africa & the erratic monsoon pattern in Pakistan are cases in point.

4. Remedial Measures to put lid on the era of global biology.

4.1. Transition towards Renewable energy resources ~~are~~ mandatory

The tradition pattern of industrialization - based on Fossil fuel - needs to be changed now. The need is to transform the whole landscape of industrialization into a renewable resources. This will not only lessen the severity of the crisis but will also guarantee sustainable development.

4.2. Fostering the culture of forestation and afforestation around the world.

Forests are largely deem as Carbon sink. To capture the green house gases from the atmosphere, the global community need to take step for the plantation of more & more trees. The model of Billion Trees Tsunami can be replicated in this case.

4.3 Global unit against this warming is badly needed.

Vand Noah Harari, in his book, "21st Lessons For 21st Century", writes "Global problems need global solutions".

In today's era the global community is deeply divided on tackling of this issue. The global community needs to set aside those differences and must come under one table to tackle this issue.

4.4 Technology like Carbon Sequestration must be promoted.

To catch carbon at initial stage or store it is necessary for lessening the temperature of earth planet. In this regard, the developed countries must come at par and extend their hands to developing countries in sharing of these technologies.

4.5 Promoting Global warming and climate change based awareness programmes.

The global community need to promote awareness regarding this menace. It can be propagated via through environmental education, Media programmes, holding environmental

Conference, involving citizens and community
in environmental and many others.

Conclusion.

The era of global warming
is scourging its havoc around
the world, thereby threatening the
survival of human and bleaching the
future of earth atmosphere. The need
is to tackle this issue by reinforcing
global institutions and unity.