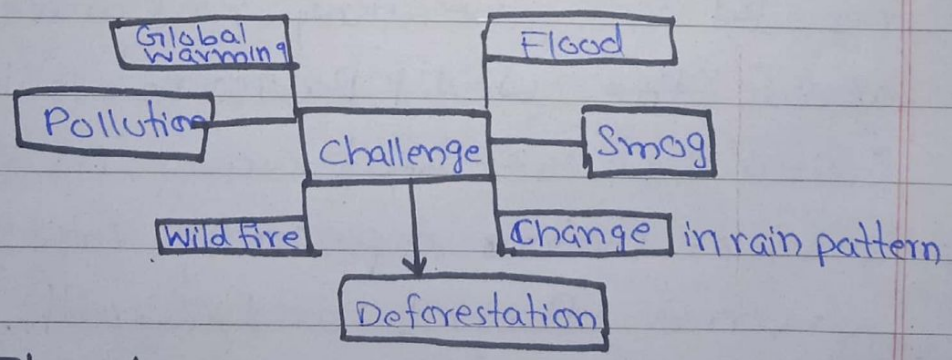


Q=8= Write short notes.

A= a) Pakistan's Environmental Challenges

Pakistan is among the countries that are worsely affected by climate change. Pakistan is facing numerous environmental challenges that are affecting its environment as well as economy. Pakistan's emission of green house gases is less than one percent but it ranks in world 10 worst climate change affected countries. It is bearing the burden of other countries reckless emissions. The environmental challenges which Pakistan is facing are:



i) Floods

one of severest environmental challenge for Pakistan is flood.

Intensity of flood is increasing in Pakistan with every passing year. In **2022**, Pakistan was hit by a catastrophic flood that costs almost **30 bn** dollars to Pakistan. It resulted in displacement of **16 million**. More than two lacs houses were damaged while it's long lasting affected **15 million** Pakistan's agriculture sector because flood had destroyed standing crops. **2022** flood ^{had} deepened poverty in Pakistan.

2) Global Warming and Heat waves

Although global warming is not only challenge for Pakistan but also for whole world. Global warming has resulted in generating heat waves across the world. Pakistan is also facing severe heat waves in summer seasons especially in province Punjab and Sindh. In **2023**, June was recorded as hottest month in Pakistan. Heat waves affect health of

people and even cause death. Last year, approximately hundred people lost their lives due to heat waves in Pakistan.

3) Smog

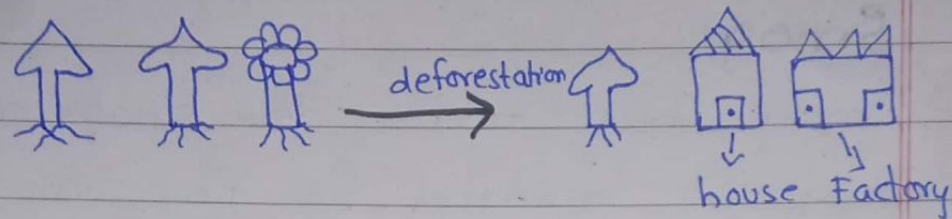
Smog has turned the shape of a giant monster for Pakistan. Condition of smog is worsening day by day in Pakistan. In 2024, Punjab and Sindh areas are under the arms of smog. Lahore and Karachi are ^{among} worst populated ~~savannah~~ cities of the world and facing severe smog. It is causing hazardous health issues in Pakistan like respiratory and cardiac disease.

4) Change in Rain Pattern

Another daunting environmental challenge for Pakistan is change in its rain pattern. Pakistan is not receiving rain on its suitable time. In 2024, Pakistan witnessed no rain in month of January and December of 2023. It ^{has} hit

Pakistan agricultural sector badly.
In Lahore city, government did
artificial rain for controlling smog.

5) Deforestation



Pakistan is facing deforestation issue
Cutting of trees is increasing with
the passage of time. People are cutting
trees due to urbanization, for making
houses, industries, for selling woods,
getting woods for using it as fuel etc.
Pakistan forest cover is less than
4% of its total land area
which depicts horrifying situation.

6) Wild fire

Wildfire is also a challenge for
Pakistan. It's causes are heat
waves as wells as man irresponsible
behaviours. In previous years, Pakistan
faced severe wild fire in province
KPK and also in Balochistan.

7) Pollution

Pakistan is facing multiple types of pollution, like land, air and water pollution. Air quality index of the major cities of Pakistan is extremely low. Land pollution is affecting our agriculture sector and if turn severe it may cause food insecurity. While water pollution is affecting blue economy of Pakistan.

Conclusion

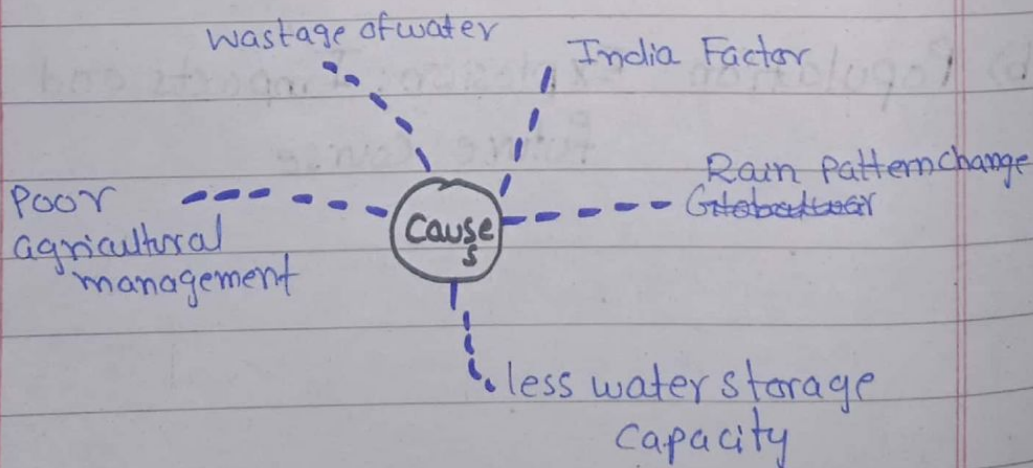
Pakistan is demanding environmental or climate justice from the world. As it is tackling multiple environmental miseries and challenges due to the irresponsible climate attitude of the world.

c) Water Crisis in Pakistan

Water scarcity has turned the shape of water crisis in Pakistan that has become a challenge for Pakistan.

The situation of water crisis is very severe as in Punjab and rural Sindh people do not even have water for drinking. They are paying price for water even for drinking purpose. In Pakistan, underground water table of has fallen substantially to less than 1000 cubic feet/meter. It portrays and give signal that in future, the situation of water crisis will worsen more.

There are multiple causes of water scarcity in Pakistan.



•) India Factor

India is violating 1960 **Indus Water Treaty** and constructing dams on rivers flowing to Pakistan, which is mitigating water supply to Pakistan. Establishment of Kishanganga dam is best example of it that has worsened water crisis in Pakistan. Moreover, Pakistan is also affected because by constructing dams, India is diverging routes of rivers that affect water flow to Pakistan.

•) Change in Rain Pattern

Change in rain pattern ^{is also} impacting Pakistan. Because, it has created water shortage. In proper rain season, rain water is utilized for agricultural practice as well as for residential usage in rural areas. But due to change in rain pattern, agriculturalist are using underground water excessively that is decreasing underground water content in Pakistan.

•) **Water Wastage**

Water is being wasted in homes, factories, ^{diming} agriculture practices.

The excessive water usage has drastically shinked water availability in Pakistan. People keep open water nulls without caring about water wastage. It is a serious problem.

•) **Poor Agriculture Management**

Water usage in agriculture sector has worsened water crisis in Pakistan. Approximately, 5 crops including cotton, rice, wheat, sugar are consuming 80% agriculture water. How can Pakistan bear such poor agriculture management amid water scarcity.

•) **Less water storage capacity**

In Pakistan, water storage capacity is less than 30 days while India has water storing capacity of about 90 days. This less storage capacity is worsening water crisis.

Way Forward

1) Enhance water storing Capacity

Pakistan should construct dams and increase capacity of existing dams for enhancing water storage capacity.

2) Water Billing

Water billing should be increased with the increase in amount of water consumption.

Water billing should be introduced ^{on} monthly basis rather than ^{quarterly}.

3) Efficient utilization of water in Agriculture

Water must be utilized efficiently to mitigate water wastage in agriculture sector.

4) Mitigate water wastage

Government should introduce strict penalties on wastage of water especially in car washing centres and factories to curb water wastage.

Conclusion

Although water crisis has become severe in Pakistan but with concerted, coordinated and dedicated efforts it can be controlled and overcome.