

2) Geo-Engineering and Nature based solutions have emerged as potential options to offset the global impacts of climate.

→ UNEP's "Emission Gap Report" says that global mean temperature will rise  $1.5^{\circ}\text{C}$ . in next five years and  $3^{\circ}\text{C}$  rise in temperature in this century. Climate change and global warming can be the next pandemic after covid-19. in next 10-15 years if we do not take this seriously.

→ Geo-engineering techniques are as follow.

1) Carbon - Dioxide Removal (CDR):- It is large scale development that will need global direction and rules to implement. ex. Afforestation, removing GHG. (Green House gases) from the atmosphere, carbon-capture and storage.

2) Solar Radiation management (SRM)

It is a process where sunlight or reflecting sunlight away from the earth.

3) Cloud brightening :- increasing albedo of cloud using salt spray on clouds to make cloud more thick which reflect more sunlight.

\* Issues in Geo-Engineering

→ These techniques are mostly on paper for now to implement these scientist have to be 100% sure that it will help in combating climate change.

→ It will change atmosphere drastically which can cause unpredicted damage on earth and living species.

→ Also not sustainable solution.

## Nature Based Solution.

- United Nation's Convention to combat desertification is the sole and legally binding international agreement to development of environment and forest and to sustain ecosystem.
- Afforestation is one process from which we can protect our ecosystem, solves land degradation problem, ~~rise~~ cools down the burning earth.
- Increased mangrove Forest & grassland eg. (Bengal mangroves, Banni grasslands)

## Conclusion

Global warming and Temperature rise are severe problems that we can not take it lightly. Geo-engineering is not the permanent solution to tackle climate change. Sustainable development and techniques without effecting in bad way to our atmosphere and planet and ensuring better future for next generation is needed. Nature based solutions are time consuming but once in progress it is more sustainable solution.