

sea level rise

Rise in the sea level due to climate change is posing new threats to coastal cities around the world.

sea level rise (SLR) is a natural phenomenon though accentuated by anthropogenic factors. When the surface level of sea increases landwards due to either ice/glacier melting or change in water density by temperature, it is called sea level rise.

Recent report of ministry of earth science - "climate change and its impact upon India" has shown that north India ocean has seen $\left\{ \begin{array}{l} 1.01/\text{anum rise till} \\ 1993 \\ 3.3 \text{ mm/anum after} \\ 1993. \end{array} \right.$
This is a regional difference which is higher than global average.

Impact of sea level rise

(i) coastal cities - most of the world's largest populated cities like mumbai, shanghai, venice, tokyo,

are coastal cities.

- last year flood in vanice created huge problem
- Indonesia is shifting ² its ~~coast~~ capital from Jakarta to away from sea.
- mumbai is also witnessing frequent kodaikanals

(ii) Island Nations → these are the most vulnerable states who had little contribution in climate change.

→ sagar Island in Bay of Bengal is on verge of submergence

→ This will create huge MIGRANT CRISIS

(iii) salinity - due to frequent sea water intrusion mostly in Gujrat - Bay of khambhat, soil salinity is affecting ground water and agriculture.

Measures to be taken:

- (i) city planning - ~~not~~ shifting cities away from coast as Indonesia has done.
- (ii) Ballages and dam - for example Carun wall of Indonesia or North Atlantic enclosure dam in Europe.
- (iii) embankments - of stones and concrete to halt sea waves
- (iv) Reducing sea/marine litter - so as to maintain clean beaches.
- (v) Achieving environmental goals of peace agreement