

In the context of sea level rise, what should be the legislative framework of India to mitigate & adapt to the impending crisis?

Recent estimate suggests that the number of people will be affected by sea level rise (SLR) along coastal areas are 7-times more than what we had thought. Thanks to ever increasing Global CO₂ emission & the effect of global warming.

SLR: Millions at risk

- Previous Study NASA's Shuttle Radar Topographic Mission (SRTM) estimates were very less because it included trees & high-rise buildings to be protrusions (above the surface) of earth

- CoastalDEM (Coastal Digital Evaluation Model) with the use of neural networking (AI & Machine learning) shows it is 7-times more

Country	People affected	
	Previous Estimate	Recent Estimate
India	5 million	36 million
Bangladesh	5 million	42 million
Global	156 million	360 million

This table
Shows the
⇒ grave danger
that coastal
areas face

Impact of SLR

i) Problem of Displacement

- Displacement to cities due to SLR from coastal region

ii) Problem of livelihood

- Relocating people is only a part of the problem
- Providing them rehabilitation, livelihood with basic amenities constitutes a bigger socio-economic problem

iii) Problem of food

- People depend on fisheries for their food & nutrition
- If SW-Sensitive zones are flooded where fishes are abundant, food crisis may arise

How to stop rise in sea level?

Well, even with increasing temperature by 1.5°C by 2100 (acc. to Paris deal), sea-level rise would rise by at least 2-meters. But there is no stopping it. But it can be mitigated by

- Creating a barrier (flood & hard barriers) along coastal areas thru Engineering methods.
- Stop infrastructure projects along coasts & integrate anticipated SLR on coastal planning
- Plan for relocation strategy in case of emergency
- Make awareness among city dwellers through education & incentives to accommodate displaced people.
- Collaborate with highly vulnerable Asian countries (Vietnam, Ind, Bang, China, Indonesia etc) & world towards stopping SLR.