




# drishti

## Cumulative Carbon Emissions Can Lead to Rise in Sea Level

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A new study published in Nature Climate Change has demonstrated the co-relation between the cumulative carbon emissions and future sea-levels over time.

The study has also raised concerns over the impending economic losses in the world's largest coastal cities due to coastal flooding.

### Key Findings

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- The sea levels are the highest ever globally. Average sea levels may rise by up to 30 feet around the world if humans continue to burn fossil and fuels causing temperatures to breach the threshold of 2 degrees Celsius above pre-industrial levels in the next few thousand years.
- With over a billion people living in coastal zones around the world, the impact of rising sea levels on human population along the coast could be larger than expected, especially in poor and developing countries, where millions are directly or indirectly depended on the oceans for their livelihood.
- There is an urgent need to prepare the coastal cities for the looming threat, especially considering the important role they play in powering the country's economy.
- Among South-Asian countries, Bangladesh is most-vulnerable, but India with its vast coastline of nearly 7,516 km on the east and west also needs to be proactive, considering the vast numbers of people who are dependent on the oceans for their livelihood.
- The climate change will not just lead to rise in sea-levels, but is set to affect storminess in the seas, which is a significant concern. It can cause maximum damage in terms of inundation of low-lying areas.
- The fact that the Indian ocean is warming up faster than other oceans is also a matter of concern. The increased heat content can fuel stronger storms along the coasts, which could be drastic and more areas can face the risk of inundation. Higher waves could occur more frequently.

- The study has emphasized upon the need to consider the rise in sea levels as important factor while making future policy decisions on limiting carbon emissions.