

# Sea levels up 4.5mm per year during 2013-22, several big cities at risk: WMO

Vishwa.Mohan  
@timesgroup.com

**New Delhi:** Underlining how climate change-linked rise in sea level poses a threat to countries like India, China, Bangladesh and the Netherlands, World Meteorological Organisation (WMO) on a Tuesday said the rise has been 4.5mm per year during 2013-22. It could continue through this century, recording a total rise of 0.6 metre by 2100, as compared to 1995-2014 level, even under the low greenhouse gas (GHG) emission scenario. This will affect not only small island nations but also big coastal cities.

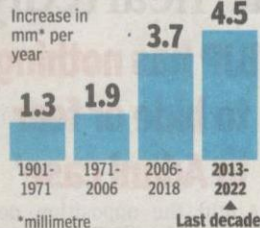
“Several big cities on all continents are threatened, such as Shanghai, Dhaka, Bangkok, Jakarta, Mumbai, Maputo, Lagos, Cairo, London, Copenhagen, New York, Los Angeles, Buenos Aires and Santiago. It is a major economic, social and humanitarian challenge,” said WMO in its fact-sh-

## TRACKING THE RISE

Global mean sea-level b/w 1901-2018:

**0.2 metre (m)**

### Break-up of rising trend



## SCENARIOS FOR THE FUTURE (compared to 1995-2014 level)

**Scenario 1** (very low GHG emission in consistent with 1.5 degree C of temp rise):

Global mean sea level rise by 2100: **0.28-0.55m**

(Sea-level rise is not globally uniform and varies regionally)

**Scenario 2** (low GHG emission in consistent with 2 degree C of temp rise):

Global mean sea level rise by 2100: **0.32-0.62m**

heet on the global sea-level rise.

It said human influence (activities) was the main driver of the rise since 1971 compared to the rise of 1.3mm per

year between 1901-1971. “Global mean sea-level has risen faster since 1900 than over any preceding century in at least the last 3000 years,” said

WMO while noting how rising temperatures are contributing to it through melting of polar ice sheets and glaciers. The danger is especially acute for 900 million people who live in coastal zones at low elevations and also for assets worth up to \$14.2 trillion by 2100 within the coastal floodplains.

“Sea-level rise is a threat-multiplier,” said UN Secretary-General Antonio Guterres while reacting to WMO’s findings which noted how even if global heating is limited to 1.5° Celsius by 2100, there will still be a sizeable rise in sea level.

Referring to Nasa’s findings that Antarctica is losing an average of 150 billion tonnes of ice mass annually and the Greenland ice cap is losing 270 billion tonnes per year, Guterres said, “Over time, Indus, Ganges and Brahmaputra rivers will shrink. And rising sea levels combined with a deep intrusion of saltwater will make large parts of their huge deltas simply uninhabitable.”