Asian coastal cities sinking fast as sea levels rise – study

Asian coastal cities sinking fast as sea levels rise – study

NEW DELHI: Spawning coastal cities in South and Southeast Asia are sinking faster than elsewhere in the world, leaving tens of millions of people more vulnerable to rising sea levels, a new study says.

Rapid urbanization has seen these cities drawn heavily on groundwater to service their burgeoning populations, according to research by Singapore’s Nanyang Technological University (NTU), published in the journal Nature Sustainability last week.

“This put cities experiencing rapid local land subsidence at greater risk of coastal flooding,” said lead author Khadeeja Ahmed, assistant professor at NTU.

Ahmed and her colleagues also found that cities in coastal areas of countries like India and China are sinking at rates up to 10 times faster than elsewhere in the world.

“Rising sea levels and extremes of water and heat demand put these cities under even more pressure,” she said.

The study found cities of all sizes have been affected.

Netherlands-based consultancy DHI, which specializes in coastal and estuarine studies and was not involved in the research, said the study offers a valuable contribution to the ongoing discussion about how to prepare coastal cities for higher sea levels.

“Public concern about climate change is increasing, but city decision-makers are also requiring more scientific analysis to help them plan ahead,” said DHI scientist Bert-Jan van der Hoek.

“NTU’s research offers us valuable new insights into whether coastal cities themselves are a significant factor in accelerating the rise of sea levels.”
Asian coastal cities sinking fast as sea levels rise – study

Asian cities are sinking faster than already projected due to climate-driven sea-level rise, the study says.

Vietnam’s most populous urban center and main business hub, Ho Chi Minh City, was sinking an average of 16.2 millimeters (0.6 inches) annually, topping the study’s verdict of satellite data from 44 large coastal cities around the world.

The southern Bangladesh port of Chittagong was second on the list, with the western Indian city Ahmedabad, Indonesian capital Jakarta, and Mexico’s commercial hub Tampico also sinking more than 20 millimeters in peak years.

"Many of these fast-subsiding coastal cities are equally dependent on agriculture, where high demands for land for economic development are leading to deforestation and coastal erosion," the study notes.

Sinking city centers will themselves be a result of climate change, but researchers said their work would give a better insight into how the phenomenon would "compound the effects of" other climate-related risks.

More than 1 billion people will live in coastal cities at risk of losing 10 meters by 2050, according to the UN Intergovernmental Panel on Climate Change.

The IPCC says that global sea levels could rise by up to 60 centimeters (24 inches) by the end of the century even if greenhouse gas emissions are sharply reduced.

https://www.pressreader.com/similar/281805697797222