Coastal cities in parts of Asia are sinking fastest — Study

By 2030, a large part of Jakarta will be uninhabitable. The root cause of land subsidence in cities is development coupled with a lack of adequate planning.

Kian Goh

The findings in the report also take into account and provide velocities for neighbourhoods further inland, where rising sea levels can still affect populations through extreme weather events, such as typhoons, hurricanes and floods.

“This study is important because it quantified land subsidence in a globally consistent manner, which can be used to improve estimations of sea level rise,” said Emma Hill, an earth sciences professor at NTU and one of the authors of the report.

The researchers did not investigate the reasons for the land subsidence as part of the scope of the study. Jakarta, one of the fastest sinking cities, is set to be replaced as Indonesia’s capital city after years of rapid growth, congestion and pollution.

In January, the Indonesian government passed a law outlining how it plans to move the capital to a jungle tract in East Kalimantan, Borneo — a decision that environmental activists say would spur further deforestation.

“By 2030, a large part of Jakarta will be uninhabitable,” said Kian Goh, an architect and urban planner who investigates how cities in the United States and Southeast Asia respond to climate change.

Goh said that while the study is helpful in giving readers a ‘big picture’ look at which coastal cities are most vulnerable to land subsidence, it does not unpack the systemic issues heightening risks in those areas.

“The places with the highest land subsidence are often home to poor population living in settlements dating back to colonial times,” he said.

“These are riskier areas, where people suffer the most.”

Drilling wells and extracting groundwater would not be necessary if cities had adequate piping and municipal water supplies, Goh said.

“The problems are ultimately due to questions of planning and politics,” said The Washington Post.