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Title: Study soil in reclaimed areas: Experts

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## Study soil in reclaimed areas: Experts

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MUMBAI: The city's shores are likely to be transformed if the proposal to reclaim areas in Navi Mumbai, along the eastern waterfront and beyond Borivli for housing and infrastructure becomes a reality.

The two-member team that prepared a soil liquefaction — when soil begins to run like muddy water during an earthquake — report for Mumbai will extend its study to Navi Mumbai.

"There are fault lines in the Panvel creek that can cause ground motion," said Deepankar Choudhury, of IIT-B. He added that the preliminary work has begun.

Geologists stressed the need to prepare detailed micro seismic zone maps, based on which construction projects would get the go-ahead in reclaimed

Mumbai, which falls in the moderate Seismic Zone 3, may not be very prone to earthquakes but one should



IIT-B Professor Deepankar Choudhury (in blue) and VJTI Professor Sumedh Mhaske after preparing a soil liquefaction report for Mumbai will extend its study

not take it for granted, said V.K. Joshi, former director, Geological Survey of India. "An earthquake comes unannounced. Therefore, the emphasis must be on pre-disaster management rather

than post-disaster management."

The chance of liquefaction is higher in reclaimed areas because these areas are filled with boulders or waste before soil is dumped on the top. "A map will A map will help decide how deep the foundation should go, especially for multi-storeyed buildings.

S.K. GUPTA, geologist

help decide how deep the foundation should go, especially for multi-storeyed buildings," said S.K. Gupta, geologist and consultant to the civic body. Currently, developers construct

buildings assuming a uniform ground shake everywhere. Having worked on similar maps for

Kolkata, Delhi, Dehradun and Jabalpur, Joshi said apart from revision of norms every five years, a susceptibility map would help builders understand the earthquake-resistant precautions needed in a particular area.

"It costs only 25 per cent more to make a building safe. When residents can spend money on beautification of balconies and interiors, why not pay a little more for safety," asked Joshi.