

Kudat earthquake a wake-up call for Sabah disaster mitigation - Expert

BP 24.02.2026

KOTA KINABALU: A strong 6.8-magnitude earthquake that struck about 49 kilometres west of Kudat at Monday midnight did not trigger any tsunami threat and caused no damage, but experts described it as a reminder that Sabah remains seismically active.

Geological disaster expert from Universiti Malaysia Sabah (UMS), Prof Dr Rodeano Roslee, said the earthquake was a "wake-up call" for Sabah and its residents, particularly those in Kudat, to take disaster mitigation and preparedness seriously.

Rodeano, who is the Dean for the Faculty of Science and Technology at UMS, said the incident comes after decades of seismic activity recorded in Kudat and highlights the need for communities along Sabah's west coast and northern areas to better understand the actual risks they face.

According to him, the incident serves as a reminder that Sabah's seismic hazard is not merely historical but ongoing as Kudat remains in a moderate-risk zone and deep moderate-magnitude earthquakes can occur without

early warning.

"Public preparedness, construction guidelines and disaster education must also be strengthened," he said in a statement on Monday.

Earlier, the Malaysian Meteorological Department said the earthquake, which struck Sabah waters at 12.57 am, posed no tsunami threat, with its epicentre located about 49 kilometres west of Kudat and tremors felt in several areas across the state as well as in Sarawak and Peninsular Malaysia.

Rodeano said the earthquake was part of the deep Wadati-Benioff zone seismicity pattern beneath northern Borneo, where similar deep earthquakes had previously been recorded in the same area, including off the northwest coast of Kota Kinabalu on April 2, 2023, and northeast of Ranau on Aug 3, 2019.

"All three earthquakes occurred at depths exceeding 600 km and were concentrated within a confined geographical zone beneath northern Sabah. This distribution indicates

ongoing deformation within a subducted oceanic lithospheric slab at depths within the mantle transition zone," he said.

According to him, mitigation measures and preparedness efforts must be implemented promptly to reduce the impact of future incidents, including avoiding construction on steep slopes and soft ground.

He also suggested the use of lightweight and elastic materials such as timber and steel, while critical buildings should be designed to withstand Mercalli Intensity VII ($\pm 0.2g$), where structures must be able to endure very strong shaking with ground acceleration of about 0.2 times the force of gravity without collapsing.

"In addition, conduct regular evacuation drills in schools, offices and high-rise buildings, while also establishing district earthquake information centres and safety route markers," he said. — Bernama