



## KERATAN AKHBAR

AKHBAR	:	NEW STRAITS TIMES
TARIKH	:	27/11/2019
JABATAN	:	SPAN
KLASIFIKASI	:	PERHATIAN

## That sinking feeling

Detailed studies must be done

**B**ELIEVE it or not — the earliest recorded occurrence of a sinkhole was some 172,000 years ago in Italy! In 2015, scientists confirmed that a skeleton found in Altamura was that of a Neanderthal man who had fallen into a sinkhole and fused to its walls thousands of years ago. The fossilised bones were discovered in 1993. One of the worst sinkhole incidents was in 2010 in Guatemala City, Guatemala, when a sinkhole swallowed a three-storey building and the surrounding infrastructure.

Reportedly, 15 people were killed. Scientifically, sinkholes aren't rare — they occur all over the world, even in the United States and the United Kingdom; for instance, some 20 per cent of land in the US are susceptible to sinkholes, according to the US Geological Survey. And in the UK, an estimated 32,000 natural sinkholes have appeared since 2014.

Kuala Lumpur, over the last two days, saw three sinkholes. And all due to underground burst pipes, according to the authorities. Since 2000, sinkholes have occasionally sprouted in the city due to the gradual caving in or sinking of an area of land. Some huge sinkholes have been reported extensively, while smaller ones go unreported. In 2013, 50 families were evacuated from their homes in Taman Permata, Dengkil, Sepang, because of sinkholes. The first documented sinkhole was in the Kinta Valley, Perak, in the 1950s. A sinkhole occurred beside a railway track near Pengkalan. Sinkhole occurrences are archived by the Minerals and Geoscience Department.

**...sinkholes could also be influenced by extreme rainfall and frequent floods.**

Sinkhole incidents reached a peak in the 1970s and 1980s just before the collapse of the tin-mining industry in the Kinta Valley where more than 50 sinkholes were found in the Lahat-Bukit Merah area.

While sinkholes are said to be a natural occurrence, geologists believe in most cases they are man-made and could have been prevented.

A geo-technical engineer says some parts of KL are of either sedimentary rock and sand or limestone formations. It is, therefore, normal for sinkholes to happen naturally, but "the process could also be due to burst pipes, erosion or construction works". Researchers from Universiti Kebangsaan Malaysia's Southeast Asia Disaster Prevention Research Initiative, meanwhile, say sinkholes could also be influenced by extreme rainfall and frequent floods.

This Leader believes the three sinkholes should not be dismissed as due to "underground burst pipes". They warrant further investigation, especially in view of the changing climate. Almost every other day there would be a report of some new extreme weather catastrophe in Europe or the Americas, and citizens would be wiped out by forest fires, droughts, floods, massive sinkholes and tornadoes.

Perhaps, a detailed geological study of KL's sub-surface, limestone areas and hazard mappings, as recommended by experts? A geologist also proposed GIS (geographic information system) studies to capture, store, manipulate and analyse KL's present spatial or geographic data. GIS and remote sensing technologies, he says, are often used by Western countries to identify conditions that may trigger sinkholes. And, regular maintenance of our underground systems and sewerage pipes are among the basics that can help prevent a sinkhole appearing suddenly. Imagine standing on solid ground one minute and the next almost falling into a gaping bottomless pit — not a nice thought at all.