

Debris slide at Kampung Sg. Chinchin, Gombak, Selangor

CHOW WENG SUM AND ZAKARIA MOHAMAD

Jabatan Mineral dan Geosains Selangor
 Lantai 6-7, Bangunan Darul Ehsan
 No. 3, Jalan Indah Seksyen 14
 40000 Shah Alam, Selangor

On 21st September 2001, at about 6.00 pm, a landslide occurred on the hill slopes of Bukit Guling Ayam at Sg. Chinchin at the 8th milestone of Jalan Gombak. In this incident, two houses were damaged and one person was killed.

Investigations carried out showed that the quartz reef along the top of the ridge at Bukit Guling Ayam intrudes into granite. The foot slopes of the hill are generally gentle to moderately steep, varying from 0° to 25° . The mid slopes are more steep with a gradient of 25° to 35° and towards the upper reaches of the slopes, the gradient is about 35° to 45° . The hill slopes are generally composed of colluvium with abundant boulders.

The landslide scar measured about 15 m wide near the crown and the sides of the scar had slumped about 1 to 1.5 m. Scouring by the slide debris which was estimated to be 4,000 cu metres in volume had left behind a scar of about 120 m long. The landslide was triggered off by the heavy rainfall which had occurred a few hours earlier.

The hillslopes in the vicinity of the landslide are potentially unstable as they are generally steep with gradients more than 30° and are underlain by colluvium. There are also some loose rock blocks in the quartz reef along the ridge which pose potential rockfall dangers.

Pada 21hb September 2001, jam 6.00 petang, satu geolongsoran tanah telah berlaku di tebing Bukit Guling Ayam, Kampung Sungai Chinchin, Batu 8, Jalan Gombak, dimana dua buah rumah telah musnah dan seorang terbunuh.

Hasil siasatan menunjukkan bahawa permata kuarza sepanjang rabung Bukit Guling Ayam telah menerobos ke dalam batuan granit. Kecerunan di bahagian cerun kaki bukit tersebut didapati tidak begitu curam dengan kecondongan antara 0° hingga 25° , manakala di bahagian pertengahan cerun, kecuraman cerun adalah di antara 25° – 35° dan kecuraman di bahagian atas cerun didapati berukuran antara 35° – 45° . Bahan yang melandas cerun bukit ini umumnya terdiri daripada koluvium dengan bongkah-bongkah batuan.

Kesan gelongsoran ini berukuran lebih kurang 15 m lebar di kawasan puncak runtuhan dengan penurunan di bahagian tepi diantara 1 m hingga 1.5 m. Kaukan tanah runtuh ini yang dianggarkan 4,000 meter padu telah meninggalkan satu kesan berukuran 120 m panjang. Gelongsoran tanah ini telah dicetuskan oleh hujan lebat yang turun beberapa jam sebelum kejadian.

Cerun-cerun bukit disekitar kawasan kejadian juga berpotensi untuk berlakunya kejadian geobencana tanah runtuh memandangkan kecuraman cerun yang umumnya melebihi 30° dan pada masa yang sama didasari oleh bahan koluvium. Terdapat juga blok-blok batuan longgar pada permatang kuarza disepanjang rabung Bukit Guling Ayam yang berpotensi untuk berlakunya kejadian geobencana jatuh batuan.