

Government Actions to Enhance the Safety of Private Slopes

Importance of Slope Maintenance

Lack of maintenance is a major contributory factor to many landslides in Hong Kong. Poorly maintained slopes can deteriorate to the point where they may fail and result in loss of life and damage to property leading to suffering and hardship. Slope owners may have to incur great expense to render their failed slope safe, to repair the damaged property and to compensate those dead/injured. Regular slope maintenance is very important.

Approach to Enhance Private Slope Safety

Private slopes should be maintained by private owners and government slopes by government. Government has set up a comprehensive slope maintenance system to regularly maintain government slopes in accordance with Geoguide 5 – A Guide to Slope Maintenance. As stipulated in the Code of Practice on Building Management and Maintenance issued by the Secretary for Home Affairs, private slopes should also be maintained in accordance with Geoguide 5. Voluntary slope maintenance by private owners is considered an effective way to keep private slopes safe and mandatory slope maintenance will only be taken as a last resort. Since many slope owners are laymen, they may not possess the required information, knowledge or expertise in slope improvement or maintenance works. To enhance the safety of private slopes, GEO/CEDD, in collaboration with relevant government departments, has developed proactive programmes to assist owners by means of:

- Public education to promote slope maintenance
- Information service and advice to assist owners to maintain their slopes
- Landslip warning to alert the public at critical periods of heavy rain
- Safety screening of old slopes to identify dangerous private slopes
- React to known hazards to safeguard public safety

Public Education, Publicity and Warnings

A sustained public education and publicity programme has been in place to raise public awareness of their slope maintenance responsibilities. Key activities include:

- (a) regular broadcast of television/radio announcements of public interest (APIs);
- (b) distribution of printed materials and promotional items to households;
- (c) roving exhibitions at popular shopping centres, schools and universities;
- (d) seminars, talks and training for slope owners and estate management staff; and
- (e) media promotion through press conferences, briefings, radio and TV interviews, and feature stories in newspapers.

During heavy rainstorms, the Hong Kong Observatory, in consultation with the GEO, issues Landslip Warning to alert the public to the landslide danger. Much effort has been made in educating the public of personal precautionary measures during heavy rainstorms to reduce the consequences of landslides.

Slope Information – Free for All

GEO has compiled a Slope Catalogue containing pertinent information on 57,000 sizeable man-made slopes in Hong Kong. Slope owners and the public can freely access the information via the Hong Kong Slope Safety Website (<http://hkss.cedd.gov.hk>). Slope maintenance responsibility can be obtained from the Lands Department Slope Maintenance Responsibility Information System (<http://www.slope.landsd.gov.hk/smris/index.html>).

Free Assistance and Advice to Private Slope Owners

The Government hotline – 1823 Citizen's Easy Link provides answers and guidance to general questions on slope safety and maintenance.

On specific slope issues, the GEO Community Advisory Unit has been providing proactive outreach services to advise private slope owners on how to proceed with the necessary slope works for compliance with Dangerous Hillside Orders or on their own accord. A regular meet-the-public service is held to answer queries and provide information on slope safety and maintenance matters.

Slope owners may apply to the Building Safety Loan Scheme (administered by the Buildings Department) for financial assistance on their slope works.

Safety Screening of Old Private Slopes

Prior to the setting up of GEO in 1977, most of the private slopes were formed with limited engineering input. The GEO has a systematic exercise to carry out safety-screening of these old private slopes to establish prima facie evidence for serving Dangerous Hillside Orders (DHO) to private slope owners under Section 27A of the Buildings Ordinance requiring them to upgrade their substandard slopes. This exercise is one-off and owners are expected to continue to maintain the safety of their slopes through regular inspection and maintenance. If owners do not carry out the investigation/stabilization works by the date specified in the DHO, BD may carry out the investigation/ works as default works and will seek to recover the costs from the owners. BD may also prosecute any person who fails to comply with DHO.

React to Known Hazards on Private Slopes

Government will react to known hazards on all private slopes. For private slopes which fail or exhibit significant signs of distress, the Buildings Department (BD), with the advice of GEO, may carry out emergency works to remove the imminent danger and recover the costs from owners. BD may subsequently issue DHO to require owners to deal with the long-term stability. Lessons learnt from major landslides will be applied to government and private slopes. Any private slopes possessing similar features will be identified from time to time and owners will be advised of necessary follow-up action including service of DHO.

Owners' Participation and Action

Despite our relentless effort to assist slope owners, government action alone cannot guarantee the safety of private slopes. Only when owners take proactive action to maintain their private slopes in accordance with Geoguide 5, can the continued stability of private slopes be achieved. We will continue to provide assistance to private slope owners and closely monitor the situation about private slope maintenance for any necessary actions.

Slope Safety Division**Geotechnical Engineering Office****Civil Engineering and Development Department****November 2006**