Message

Hong Kong's mountainous terrain, heavy rain and dense development make us prone to risk from landslides. To reduce this risk, we have implemented a comprehensive slope safety system through the setting up of safety standards, statutory and administrative geotechnical controls as well as the upgrading and maintenance of slopes. The overall risk reduction achieved over the past 20 years is a result of the effectiveness of the system. We have set out new initiatives to attain the highest international standards in slope safety for Hong Kong.

With the completion of the 5-year Accelerated Landslip Preventive Measures (LPM) Programme by 2000, we will have reduced the overall landslide risk of man-made slopes to less than 50% of the level in 1977. We have completed the preparatory work for the 10 year expanded LPM Programme to commence in 2000 to upgrade more substandard slopes. We will also ensure that all government slopes will be regularly maintained and that, through education, publicity, advice and legislative enforcement, owners of private slopes will maintain their slopes properly. We estimate that by 2010, we will further reduce the overall landslide risk to below 25% of the level in 1977.

Your comments or suggestions, which will help us attain a higher standard in our services, are most welcome.

(Lee Shing-see)
Secretary for Works

Slope Safety for All

Our Policy Objective is to meet Hong Kong's needs for the highest standards of slope safety by ensuring the safety of new slopes, enhancing the safety of existing slopes, promoting proper maintenance of slopes and providing public education, publicity and information services on slope safety.

Our targets this year in pursuing this Policy Objective are –

- to reduce by September 2000 the landslide risk arising from old substandard man-made slopes to less than 50% of the risk that existed in 1977
- to further reduce by end 2010 such risk to less than 25% of the risk in 1977

Progress Made

In the past year, we had continued to deliver results in all six Key Result Areas under this Policy Objective. We have achieved satisfactory progress towards all the targets set out in previous years.

In the past year, we had two targets at the Policy Objective level.

Our first target was to reduce by the year 2000 the landslide risk arising from old substandard man-made slopes to less than 50% of the risk that existed in 1977. During the year, we have continued to maintain a quality assured checking system to ensure the safety of new slopes. We have enhanced the safety of existing slopes, both government and private, through upgrading and proper maintenance. We have strengthened the Slope Maintenance Units in the six Works Departments and set up a Community Advisory Unit to assist private slope owners in discharging their responsibilities. Through satisfactory progress in the above areas, we are confident that the overall landslide risk arising from old substandard man-made slopes will be reduced to less than 50% of the 1977 level by the year 2000.

Our second target was to further reduce the landslide risk to less than 25% of the 1977 level by the year 2010. In 1998-1999, we have completed the preparatory work for the 10-year extended Landslip Preventive Measures (LPM) Programme. We have increased the current average annual LPM output by over 40%, i.e., by upgrading 250 man-made government slopes per year.

Key Result Areas (KRAs)

To ensure that this Policy Objective can be achieved, we must deliver results in a number of key areas, that is, we must –

1 Improve slope safety standards, technology, and administrative and regulatory frameworks

Continuous improvement in technical standards and geotechnical control is needed to meet changing public expectations on slope safety. We will enhance our geotechnical control strategy on building and infrastructure developments, publish geotechnical standards and guidance documents, investigate serious landslides and carry out research and development to apply the latest technology to improve slope safety. In so doing, we will take into account technical advice from local and international experts, and in particular from the Slope Safety Technical Review Board, which was set up in 1995 to advise the Government on technical aspects of slope safety. The Board currently comprises Professor N. R. Morgenstern of Canada, Dr. S. Lacasse of Norway and Professor C. F. Lee of Hong Kong.

Progress Made

In the past year, we aimed at improving slope safety standards and the geotechnical control framework.

Progress in both aspects was satisfactory. We have continued with the three-year trial on the integrated approach to slope stability assessment as recommended by Professor Morgenstern, and a strategy for long-term implementation commencing 2000 is being formulated. We have completed the audit on the performance of the Slope Safety System of the Geotechnical Engineering Office and have initiated improvements to our slope engineering practice.

We have made good progress in the preparation of the Highway Slope Manual and in the guidance document for an extended scope of prescriptive maintenance measures. Actions have been taken to enhance geotechnical control of private building developments, private slopes and public projects. We have also accomplished the review of administrative guidelines for allocating maintenance responsibility for slopes to government departments.

To achieve results in this area, various initiatives have been undertaken in the past years. Details are set out below –

Initiative *	Target #	Present Position +
To complete a three-year trial on the integrated approach to slope stability assessment as recommended by Professor Morgenstern *(Civil Engineering Department (CED))*	To complete a three-year trial and formulate a long-term strategy in 1999 *(1998)*	The three-year trial will be completed by the end of 1999 as planned. A strategy for long-term implementation commencing 2000 is being formulated. *(Action in Progress: On Schedule)*
To improve the technology, priority classification systems and performance measurement methods used in slope improvement works and the slope safety system *(CED)*	• To complete a guidance document for an extended scope of prescriptive maintenance measures by December 1999 *(1998)*	• A draft guidance document has been prepared for discussion and finalisation. *(Action in Progress: On Schedule)*
	• To improve Landslip Warning Criteria through research into rainfall and landslide correlation by March 1999 *(1998)*	• An improved Landslip Warning Criteria has been put to use in the wet season of 1999. *(Action Completed)*
	• To upgrade the automatic raingauge network by June 1999 *(1998)*	• An upgraded automatic raingauge network has been installed and put to use. *(Action Completed)*

* the bracketed information denotes the agency with lead responsibility for the initiative
\# the bracketed information denotes the year in which the target was set
\+ the bracketed information denotes the status of the target

Initiative	Target	Present Position
To introduce improved means of site characterisation *(CED)*	To introduce a practical geological and optical method to identify weaknesses in the ground in Hong Kong by September 2000 *(1998)*	Various methods have been evaluated and the natural gamma ray method is the most promising. Practicality of the technique will be site-verified and a decision will be made on suitability for routine usage by September 2000. *(Action in Progress: On Schedule)*
To produce a Highway Slope Manual *(CED)*	To publish the Highway Slope Manual by December 2000 *(1998)*	The first draft of the Highway Slope Manual has been completed, and comments are being sought. *(Action in Progress: On Schedule)*
To review the administrative guidelines for allocating responsibility for slopes to various government departments *(Works Bureau (WB))*	To complete revisions to administrative guidelines on maintenance of the stability of slopes by September 1999 *(1998)*	Review and revision of the administrative guidelines have been completed. *(Action Completed)*
To investigate serious landslides and derive post-mortem improvement measures *(CED)*	To complete by September 1999 an audit report covering the year 1998 on the performance of the Slope Safety System of the Geotechnical Engineering Office based on a review of landslides in 1998 *(1998)*	The audit report has been completed and recommended improvement measures are being implemented. *(Action Completed)*

Initiative	Target	Present Position
To review and amend the Buildings Ordinance to enhance the geotechnical control of building developments *(CED)*	• To make interim amendments to the Buildings Ordinance to enhance geotechnical control of building developments by July 2000	• The proposed amendments are being finalised for submission into the Legislative Council in early 2000.
	• To complete a comprehensive review of statutory geotechnical controls in private slopes and developments by December 2000 *(1998)*	• The review is being carried out. *(Action in Progress: On Schedule)*
To conduct detailed risk assessments on natural hillside areas susceptible to landslides *(CED)*	To complete site-specific quantitative risk assessment studies at two selected areas by August 1999 *(1998)*	The assessment study report has been completed. *(Action Completed)*
In 1998, to complete a preliminary assessment of the landslide hazards associated with natural hillsides and to conduct a detailed risk assessment, to develop appropriate measures to mitigate the risk in these areas *(CED)*	To complete the assessments by end 1998 *(1997)*	The preliminary assessment has been completed. The scope of the detailed risk assessment had been reviewed and replaced by a new initiative in 1998. *(Action Completed)*

Looking Forward

In the next 12 months, we will assess our performance in respect of this KRA against the following indicator –

Indicator	1999 Target
The percentage of new standards and guidelines completed within scheduled time	90%

We will undertake the following initiatives to deliver results in this area –

Initiative	1999 Target
To investigate serious landslides in 1999 and derive improvement measures *(CED)*	• To complete examination of all reported landslides by April 2000 • To complete by December 2000 a report on improvements to slope engineering practice based on investigations of landslides in 1999
To introduce improved means of site characterisation *(CED)*	To conclude a trial of practical means of automatic acquisition of ground water information by December 2000
To enhance the aesthetic aspects of slope works *(CED)*	To produce guidelines on blending man-made slopes and retaining walls with their surroundings by September 2000
To publish a new reinforced fill design guide for Hong Kong *(CED)*	To publish the new design guide by December 2002
To improve the technology, priority classification systems and performance measurement methods used in slope improvement works and the slope safety system *(CED)*	• To produce a design guide for landslide debris barriers by June 2000 • To prepare a report on rainfall return periods at specific raingauge locations by June 2000

2 Ensure safety standards of new slopes

Every year, over a thousand new man-made slopes are formed as a result of building and infrastructure developments. The design and construction of a new slope to standards recognised by the geotechnical profession is the first step towards ensuring its long-term safety. We will check the adequacy of all slope works, site formation works, earth retaining structures and deep excavations that are designed and constructed by the private sector, public authorities and government departments. We will maintain our quality management system for geotechnical control through compliance with the international standard of ISO 9001.

Progress Made

In the past 12 months, we aimed to upgrade the checking system for the design and standard of supervision of construction of all new slopes in order to contain the number of substandard man-made slopes.

Progress towards this target was satisfactory. We have obtained the ISO 9001 Certification of the checking work of the Geotechnical Engineering Office in January 1999. The Hong Kong Quality Assurance Agency carried out the first surveillance audit on the checking system in July 1999 with no non-conformances or other adverse findings identified.

To achieve results in this area, the following initiative has been undertaken in the past years –

Initiative	Target	Present Position
To check more effectively the design and standard of supervision of construction of all new slopes *(Civil Engineering Department(CED))*	To maintain quality-assured checking by obtaining ISO 9001 Certification of checking work of the Geotechnical Engineering Office by March 1999 *(1998)*	ISO 9001 Certificate was obtained in January 1999. *(Action Completed)*

Looking Forward

In the next 12 months, we will assess our performance in respect of this KRA against the following indicators –

Indicator	1999 Target
Success in maintaining the checking process for all new slopes in compliance with the ISO 9001 quality assurance requirements	Not more than three non-conformances found in surveillance audits on the checking process under the ISO 9001 Certification
Success rate in preventing major landslides in slopes checked as conforming to the current safety standards	99.8%

We will undertake the following initiatives to deliver results in this area –

Initiative	1999 Target
To enhance the standard of supervision of geotechnical works *(CED)*	To increase the number of inspections of active construction sites by the Geotechnical Engineering Office from 890 to 950
To enhance the effectiveness of checking of new slopes by setting up a computerised District Information System *(CED)*	To set up the System for all sites on Hong Kong Island by December 2000

3 Rectify substandard government slopes

Prior to the setting up of the Geotechnical Engineering Office in 1977, there was very limited geotechnical control of slope formation both in the private and public sectors. The stability of many old slopes is therefore in doubt. Of the 37 000 old slopes in the Government Slope Catalogue, about 70% (i.e., 25 000) are government owned and about 10 000 of these affect developments and major roads. We will maintain an on-going LPM Programme up to the year 2010 to systematically rectify substandard government slopes so as to progressively reduce the risk from slopes which affect the community directly.

Progress Made

In the past 12 months, we aimed to accelerate the LPM Programme for the upgrading of substandard government slopes and to upgrade smaller roadside government slopes not covered by the LPM Programme.

Progress in meeting the target was satisfactory. Upgrading of 250 government slopes will be completed by the end of 1999. Preparatory work for the 10-year extended LPM Programme has been completed. Improvement works for 198 out of 200 government man-made slopes near schools have been completed; work for the two remaining slopes has been delayed by access and site constraint problems, but will be completed by December 1999.

Progress in upgrading 90 smaller roadside government slopes is satisfactory, and the target will be increased from 90 to 95 for the coming year.

To achieve results in this area, various initiatives have been undertaken in the past years. Details are set out below –

Initiative	Target	Present Position
To accelerate the LPM Programme for the upgrading of large substandard government slopes to cope with the increased number of slopes identified through the new slope cataloguing exercise, and extend the Programme up to 2010 *(Civil Engineering Department (CED))*	To increase the current LPM output by 40% by upgrading 250 man-made slopes per year from 1999 onwards *(1998)*	Upgrading of 250 government slopes have been initiated under the current LPM for completion by the end of 1999. Preparatory work for the extended 10-year LPM Programme has been completed. *(Action in Progress: On Schedule)*

Initiative	Target	Present Position
To upgrade smaller roadside government slopes not covered by the LPM Programme to reduce the landslide risk posed to road users *(Highways Department (HyD))*	To upgrade an additional 90 smaller roadside government man-made slopes every year from 1999 onwards *(1998)*	Slope selection, works planning and design are being carried out. Progress in construction by most contractors has been satisfactory. *(Action in Progress: On Schedule)*
To rectify government slopes affecting schools to reduce the landslide risk to students *(CED)*	To complete by mid-1999 the study and necessary improvement works for 200 government man-made slopes affecting schools *(1998)*	The study and necessary improvement works for 198 government man-made slopes affecting schools were completed in September 1999, with that for the remaining two slopes to be completed by the end of 1999. *(Action in Progress: Behind Schedule)*

Looking Forward

In the next 12 months, we will assess our performance in respect of this KRA against the following indicators –

Indicator	1999 Target
The number of substandard government slopes upgraded	250
Success rate in preventing major landslides in upgraded government slopes	99.8%

We will undertake the following initiatives to deliver results in this area –

Initiative	1999 Target
To upgrade slopes affecting public housing estates to reduce the landslide risk to residents *(CED/Housing Department)*	To complete by September 2001 the study and necessary improvement works for about 200 slopes affecting public housing estates
To upgrade roadside government slopes not covered by the LPM Programme to reduce the landslide risk posed to road users *(HyD)*	To improve in 2000 the stability of 95 government slopes by prescriptive measures
To adopt an integrated approach to government road and development projects to ensure that slopes affecting or affected by the projects are upgraded to current safety standards as part of the implementation of the project *(All project departments)*	To ensure all appropriate slopes are identified at the Preliminary Project Feasibility Study stage for inclusion into public works projects for upgrading

4 Maintain all government man-made slopes

Regular maintenance is essential to the continued stability of all man-made slopes. In addition to regular maintenance, we will also carry out enhanced maintenance using prescriptive measures to achieve quick improvement to the stability of older slopes. To this end, we will clearly and systematically identify the maintenance responsibility of all man-made slopes, government or private, and disclose the information to concerned parties and the public at large. For government slopes, we will ensure that the responsible government departments will carry out the necessary regular maintenance as well as enhanced maintenance. We will also increase the inspection and repair of public drains and water supply pipes which may affect slope stability.

Progress Made

In the past year, we aimed at clear identification of maintenance responsibility of slopes and implemented measures to ensure that government slopes are maintained in accordance with the unified standard for both public and private sectors as promulgated in Geoguide 5 – A Guide to Slope Maintenance.

Progress towards this target was satisfactory. We have identified maintenance responsibility of the 54 000 man-made slopes registered in the Government Slope Catalogue. We are setting up a computerised information system containing information on maintenance responsibility for access by the public. We have assigned additional resources to government departments for maintenance of slopes for which they are responsible. Maintenance departments are actively arranging for the first Engineer Inspection (i.e., comprehensive inspection by professional engineer) of their slopes.

To achieve results in this area, various initiatives have been undertaken in the past years. Details are set out below –

Initiative	Target	Present Position
To complete the systematic identification of the maintenance responsibility for the 54 000 man-made slopes in Hong Kong *(Lands Department (LD))*	To complete the task by the end of 1999 *(1998)*	The maintenance responsibility of the 54 000 slopes has been identified and the information is being put on computer for public access. *(Action in Progress: On Schedule)*

Initiative	Target	Present Position
To disclose the slope maintenance responsibility to the public and to upkeep the database and handle appeal cases *(LD)*	To disclose the slope maintenance responsibility to the public by the end of 1999 *(1998)*	Legal issues in relation to the disclosure have been resolved. Preparatory work is proceeding smoothly. *(Action in Progress: On Schedule)*
To enhance the capability of the six government departments responsible for the maintenance of government slopes to cope with the increased number of slopes identified through the new slope cataloguing exercise *(Works Bureau (WB))*	• To strengthen Slope Maintenance Units in the six government departments responsible for the maintenance of government man-made slopes from April 1999 *(1998)*	• 120 posts have been allocated to the six government departments for slope maintenance. *(Action Completed)*
	• To complete a thorough review of slope maintenance by 2000 *(1998)*	• Preliminary slope maintenance action plans have been prepared and examined. The review of slope maintenance operations will be completed by end-2000. *(Action in Progress: On Schedule)*

Initiative	Target	Present Position
To complete the systematic inspection and repair of all government underground drains and water pipes which may affect the stability of adjacent slopes *(WB)*	• To complete the systematic inspection and necessary repair works of underground water pipes, sewers and drains within public housing estates and affecting slopes by 2000 *(1998)*	• Leakage detection of all buried water carrying services adjacent to slopes within public housing estates has been completed by the Housing Department. Repair works on the identified leaking buried services are being carried out. *(Action in Progress: On Schedule)*
	• To complete the systematic inspection and necessary repair works of underground water pipes, sewers and drains within government buildings and affecting slopes by 2001 *(1998)*	• Consultants and contractors have been commissioned by the Architectural Services Department to inspect and repair the underground water pipes, sewers and drains for completion in 2001. *(Action in Progress: On Schedule)*
	• To complete the systematic inspection and necessary repair works of underground water pipes affecting slopes near buildings and major roads by 2002 *(1998)*	• Site investigation on the underground water pipes affecting slopes near buildings and major roads has been completed by the Water Supplies Department. Leakage detection and necessary repair on suspected pipes are being carried out. *(Action in Progress: On Schedule)*
	• To complete the systematic inspection and necessary repair works of underground sewers and drains affecting slopes near buildings and major roads by 2004 *(1998)*	• Consultants and contractors have been commissioned by the Drainage Services Department to inspect and repair the underground drains. *(Action in Progress: On Schedule)*

Looking Forward

In the next 12 months, we will assess our performance in respect of this KRA against the following indicators –

Indicator	1999 Target
The percentage of government slopes in an improved state of maintenance	50% by September 2000
The percentage of government slopes having received a comprehensive inspection by professional engineer on a 5-year cycle	95% by September 2002

We will undertake the following initiatives to deliver results in this area –

Initiative	1999 Target
To enhance efficiency and effectiveness in the disclosure to the public and upkeeping of the database on slope maintenance responsibility *(LD)*	To set up a computerised Slope Maintenance Responsibility Information System by September 2000
To carry out Engineer Inspections for maintenance of government slopes in the Government Slope Catalogue *(Agriculture and Fisheries Department, Architectural Services Department, Drainage Services Department, Highways Department, Housing Department, Lands Department and Water Supplies Department)*	To complete the Engineer Inspections on 12 000 government slopes by March 2001

5 Ensure that owners take responsibility for slope safety

To reduce the landslide risk posed by private slopes, private owners must take up their responsibility to maintain private man-made slopes and to upgrade those which are substandard. We will continue to carry out safety-screening of private man-made slopes to establish prima facie evidence for serving Dangerous Hillside Orders to private owners under the Buildings Ordinance to require them to upgrade their substandard slopes. We will also continue to take statutory action to require private owners to inspect and repair private underground drains and water pipes which may affect the stability of adjacent slopes. Together with the new public education, publicity and information services outlined in the next KRA, we will ensure that private owners take care of their own slopes, thereby achieving a major reduction in the landslide risk posed by private slopes.

Progress Made

In the past year, we aimed at safety-screening and taking statutory actions on private owners for substandard private slopes, and private underground pipes which may affect the stability of adjacent slopes.

Progress in both areas was satisfactory. We have completed safety-screening studies of 400 man-made private slopes in 1999, and have initiated actions to issue Dangerous Hillside Orders on 350 of these slopes. We have also served 12 Section 27C Orders for investigation and repair of water pipes affecting slopes. Preparatory work for the 10-year extended LPM Programme has been completed, which will enable us to sustain the safety-screening output at the targeted level of 300 private slopes per year.

To achieve results in this area, various initiatives have been undertaken in the past years. Details are set out below –

Initiative	Target	Present Position
To carry out more safety-screening studies of private slopes to require owners to rectify their substandard slopes *(Civil Engineering Department (CED)/ Buildings Department (BD))*	To complete safety-screening studies of 300 man-made private slopes per year from 1999 onwards *(1998)*	Safety-screening studies of 400 slopes have been completed, which are 100 more than the target set. *(Action Completed)*

Initiative	Target	Present Position
To enforce more vigorously the provisions of the Buildings Ordinance to require owners to inspect and repair private underground drains and water pipes which may affect the stability of adjacent slopes *(BD)*	To complete screening studies of underground services affecting 500 slopes per year and serve Section 27C Orders where necessary for investigation and repair of suspected services from 1999 onwards *(1998)*	Screening studies of underground services affecting 320 slopes have been completed, resulting in 12 nos. Section 27C Orders being served. The remaining studies affecting 180 slopes will be completed by the end of 1999. *(Action in Progress: On Schedule)*

Looking Forward

In the next 12 months, we will assess our performance in respect of this KRA against the following indicators –

Indicator	1999 Target
The number of private slopes subject to safety-screening study	300
The number of Dangerous Hillside Orders issued by Buildings Department on which remedial actions have been taken by the private owners	200

We will undertake the following initiative to deliver results in this area –

Initiative	1999 Target
To carry out a review of maintenance of private slopes (CED)	To complete a review report by the end of 2000

6 Promote public awareness and response in slope safety through public education, publicity, information services and public warnings

Through publicity and education, private owners are becoming more aware of their slope maintenance responsibilities. But as laymen, many of them may not possess the required information, knowledge or expertise in slope improvement or maintenance works. We will provide the public with comprehensive information on slopes, identify the ownership of each man-made slope in terms of maintenance responsibility, and provide an advisory service on how to tackle slope safety issues. We will step up public education on slope maintenance and enhance our public communication channels on slope safety matters. We will continue to issue Landslip Warnings and to post warning signs. To minimise the adverse consequences of landslips to the community, we will continue to educate the public on slope safety so that they can take personal safety precautions to protect themselves and their families during Landslip Warnings. We will also continue to inspect squatter villages on steep terrain to identify huts at risk, recommend clearance and advise the occupants to seek safe shelter during heavy rain.

Progress Made

In the past year, we aimed to step up our efforts on public education, publicity, information services and warnings to raise the levels of public awareness and response to the slope safety problem in Hong Kong.

Progress towards this target was satisfactory. Our public surveys show that more private owners are now aware of their responsibilities for slopes. To assist them in discharging their responsibilities, a Community Advisory Unit has been set up.

We have prepared an educational toolkit on slope safety for use by all secondary schools and staged regular roving exhibitions on slope safety. We have launched the Hong Kong Slope Safety Website (http://hkss.ced.gov.hk) for access to slope information by the public.

To achieve results in this area, various initiatives have been undertaken in the past years. Details are set out below –

Initiative	Target	Present Position+
To establish a new and comprehensive slope information system containing information on all 54 000 slopes in Hong Kong and accessible to the public through the Internet *(Civil Engineering Department (CED))*	• To establish the system by the end of 1998 • To develop the full Slope Information System on the Internet and in Building Management Resource Centres by March 1999 *(1998)*	• The Slope Information System was established in December 1998. • The Hong Kong Slope Safety Website (http://hkss.ced.gov.hk) was launched and accessible to the public in Building Management Resource Centres since March 1999. *(Action Completed)*
To enhance and reinforce private owners' acceptance of their responsibility for slope safety *(CED)*	To set up a Community Advisory Unit in the Geotechnical Engineering Office in April 1999 to – • organise seminars and talks for private slope owners on matters relating to slope safety and maintenance • provide a meet-the-public service to answer queries and provide information on slope safety matters • meet private owners' representatives who have received Dangerous Hillside Orders to advise them on how to proceed with the necessary slope upgrading works • meet Owners' Corporations and Mutual Aid Committees to advise them on how to proceed with the necessary slope maintenance works *(1998)*	A Community Advisory Unit was set up in April 1999. Seminars/talks and meet-the-public sessions have been held regularly. Meetings with Owners' Corporations and private owners who received Dangerous Hillside Orders have also been organised. *(Action in Progress: On Schedule)*

Initiative	Target	Present Position
To step up publicity on emergency preparedness and personal precautionary action during landslide warnings (CED)	• To prepare an educational kit on slope safety by December 1999 • To stage eight roving exhibitions on slope safety issues in 1999 *(1998)*	• An educational toolkit on slope safety has been prepared for trial use by selected schools in September 1999. • Six exhibitions on slope safety issues have been held and two more exhibitions have been scheduled for November and December 1999. *(Action in Progress: On Schedule)*

Looking Forward

In the next 12 months, we will assess our performance in respect of this KRA against the following indicators –

Indicator	1999 Target
The level of public awareness of the slope safety problem in Hong Kong as revealed by independent annual opinion survey	70%
The percentage of slope owners who understand their maintenance responsibilities as revealed by independent annual opinion survey	75%
The level of public awareness about the appropriate safety precautions that should be taken during heavy rainstorm as revealed by independent annual opinion survey	65%
The number of squatter huts inspected and residents warned of potential danger	3 800 huts

We will undertake the following initiatives to deliver results in this area –

Initiative	1999 Target
To develop the Chinese language version of the Slope Information System for access by the public through the Internet *(CED)*	To establish the Chinese language version by March 2000
To further improve the Geotechnical Engineering Office (GEO) Landslip Emergency Service *(CED)*	To introduce a new computerised system for more rapid and efficient handling of landslip incident reports by April 2000
To provide information to the public through the Internet on the natural hillside processes of landslides, rockfalls and erosion *(CED)*	To develop a new section on the Hong Kong Slope Safety Website by June 2000
To provide geological information to the public and the profession *(CED)*	To prepare memoirs on the Geology of Hong Kong by September 2000
To identify squatter huts at high risk from landslides so that clearance actions can be taken *(CED)*	To inspect 3 800 squatter huts by September 2000, and to make clearance recommendations and warn residents