

DIRECTORATE GENERAL CIVIL DEFENCE



Community Awareness And Preparedness



LANDSLIDE

Presented by

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Precaution to avoid landslides

- ◆ Don't disturb the mountain/steep slopes without advice of technical persons.
- ◆ Avoid deforestation and fire of jungle for cultivation/other developmental works.
Analyze past history of landslides in year area and don't ignore usual fall of stones.
- ◆ Avoid construction of house or habitations on debris.
- ◆ Don't construct house or live in slope landslide or its adjacent area.
Restrict flow of rainwater towards or inside landslide.
- ◆ Be cautious in landslide prone area during a rain and inform the authority immediately if any change in earth is noticed.

Landslide warning signs

- ◆ Changes in landscape such as patterns of storm water drainage on slopes, land movement; small slides, progressively leaning trees etc.
- ◆ Doors or windows sticks or jam for the first time.
- ◆ Cracks appear in the plaster, tiles, walls or foundation.
- ◆ Outside walls of house or stairs begin pulling away from the building.
- ◆ Fence, retaining walls, electricity poles or trees tilt or move.
- ◆ Slowly developing, widening cracks appear on the ground.
- ◆ Ground bulges at the base of a slope.
- ◆ Water breaks through the ground surface at new places.

- ◆ The ground slopes downward in one direction and may begin shifting in that direction.
- ◆ A faint rumbling sound is heard.
- ◆ Unusual sounds such as tree cracking or other indication of possible debris flow.
- ◆ Continuous rain or snowfalls in area prone to landslide.
- ◆ Movement of wild animal towards human habitations may indicate some flood/disturbance on ridges/hills.

Safety Measures before Landslides

- ◆ Be alert during intense, short bursts of rain especially after longer periods of heavy rainfall and damp weather.
- ◆ Do not build house near steep slopes, close to mountain edges, near drainage ways or natural erosion valleys.
- ◆ Construct embankment/retaining wall on high gradient slope.
- ◆ Build walls to divert debris flow.
- ◆ Regulate vulnerable settlements.
- ◆ Plant trees on susceptible landslide area.
- ◆ In mud flow areas, build channels or deflection walls to direct flood around buildings.
- ◆ Always be watchful on hill roads and try to observe features like cracks on roads and slopes.
- ◆ Have flexible pipe fittings installed to avoid gas or water leaks, as flexible fittings are more resistant to breakage.
- ◆ Contact local authorities for advice.
- ◆ Inform affected neighbors and local official/Police.

- ◆ Keep close watch on erosion caused by river/rain.
- ◆ Move away if any indication of land sliding appears, near your habitation/house.
- ◆ If possible, have insurance cover for life, injuries and properties.

Safety measures during landslides.

- ◆ Stay alert and awake as such incidents occur when people are at sleep.
- ◆ Listen to radio or television for warnings about intense of rainfall and follow advice.
- ◆ Listen to any unusual sounds that might indicate moving debris, such as trees cracking or boulders knocking together and stay at safe distance.
- ◆ If you are near stream or channel, be alert for sudden increase or decrease in water flow and change from clear to muddy water. such change may indicate landslide upstream, so be prepared to move quickly.
- ◆ Don't delay in moving out and, safe yourself first than your belongings.
- ◆ Be alert when driving: Embankments along roadsides are particularly susceptible to landslides. Watch on road for collapsed pavements, mud, fallen trees/boulders live-wire etc.
- ◆ Do not venture to walk/cross the landslide area.
- ◆ If not possible to run away during sliding, take safety behind heavy rocks/trees to avoid injury from bolders/debris.

Safety measures After Landslides

- ◆ Stay away from slide area, there may be danger of frequent slides.
- ◆ Listen local radio, on local warning system television for latest information/warning.
- ◆ Be prepared to face flood, which may occur after a land slide.
- ◆ Check for injured and trapped victims near the slide, without entering directly into the sliding area.
- ◆ Direct rescuers to the affected areas or towards injured/trapped victims.
- ◆ Helps neighbor's as they may require assistance for infants, elderly and disabled.
- ◆ Report about broken/damaged utility lines, road and railway lines to authorities.
- ◆ Check buildings foundations, walls, chimneys and surrounding area of damaged and take precautionary measures.
- ◆ Repair/replant damaged ground as soon as possible. Increased erosion caused by loss of ground cover can lead to fresh flood and landslides in future.
- ◆ Don't return to affected area immediately, wait and watch the situation.

- ◆ Carry rescue and removal of debris under proper guidance of trained personnel.
- ◆ Take care of injured and affected family.
- ◆ Seek advised from expert for evaluating landslide hazard and take further necessary action to reduce land slides.

