

Classification	Definition	Keyword search terms
Unknown	No trigger or obvious cause specified.	–
Rainfall	Rainfall raises pore pressure in slope materials triggering failure.	“rain”, “sleet”, “storm”, “hurricane”, “precipitation”, “flood”, “water”, “torrent”
Earthquake	Strong ground motion associated with an earthquake weakens slope materials triggering failure (coseismic landslides).	“earthquake”, “aftershock”, “seismic”, “tremor”
Illegal mining	Unregulated or informal mining of slope materials in designated quarry or mine, where permission to extract material has not been granted.	“illegal”, “permit”, “regulat”, “close”, “informal”, “pick”, “illicit”, “abandoned”, “traditional”, “license”, “ban”, “mine”, “quarry”, “spoil”, “pit”, “excavat”
Illegal hill cutting	Hill cutting refers to the process of removing material from a hillslope for the purposes of altering its shape and/or to obtain slope material for use in construction, manufacture or farming. It is differentiated from mining because it occurs on slopes that are not within a designated site of mining or quarrying; instead hill cutting typically occurs on individual slopes on steep agricultural land or on man-made slopes such as those along transport routes. Hill cutting differs from construction because slope modification does not follow an engineering design to ensure slope stability. Hill cutting is assumed to be undertaken in an informal, unregulated manner (this is frequently noted in landslide reports).	“hillcut”, “illegal”, “permit”, “regulat”, “informal”, “illicit”, “traditional”, “license”, “ban”, “excavat”
Legal mining	Regulated and/or permitted mining of slope materials in designated quarry or mine, where permission to extract material has been granted and operations are managed.	“legal”, “permit”, “regulat”, “pick”, “license”, “mine”, “quarry”, “spoil”, “pit”, “excavat”
Mining (unknown)	Slope materials are extracted from a designated quarry or mine, but the report does not make it clear whether the extraction is permitted or not.	“quarry”, “mine”, “spoil”, “pit”, “excavat”
Construction	Permitted modification of a slope for the purposes of a construction project undertaken by professional labourers, following planning approval.	“excavat”, “construction”, “site”, “road”, “build”, “dig”, “labour”
Conflict and explosion	Landslide triggered by the detonation of an explosive device during military combat.	“bomb”, “mine”, “soldier”, “army”, “explode”, “explosion”, “war”, “conflict”
Leaking pipe	Utility pipes carrying water have been damaged and leak water onto a slope surface or within the hillslope, compromising its stability.	“pipe”, “leak”, “burst”
Garbage collapse	Collapse of piles of municipal waste onto people, where stability of waste piles was disturbed by the passage of a person or persons.	“waste”, “trash”, “rubbish”, “garbage”, “dump”, “pick”
Recreation	Triggered by passage of a person or persons walking or climbing over a hillslope for recreation.	“climb”, “mountain”, “expedition”, “ascent”, “trek”
Human action (unspecified)	Landslide report refers to a person or people present on a hillslope that collapses, without specifying the reason people occupied the slope or the landslide trigger.	“people”, “person”, “men”, “women”, “children”, “occup”
Animal activity	Occupation of slope by animal triggering failure, either by weight and movement of animal on slope surface or by burrowing within the slope subsurface.	“animal”, “burrow”, “tunnel”
Fire	Naturally occurring or man-made fires, typically occurring in dry climates on vegetated terrain.	“fire”
Natural dam or riverbank collapse	Collapse of a riverbank or natural dam without an apparent trigger, but likely caused by pore pressures building over time to a critical threshold in response to water levels. Material typically fails into a body of water and often generates a flood wave.	“river”, “bank”, “dam”, “earth”, “flood”, “wave”, “collapse”
Freezing	Heavy snowfall and expansion of water in hillslopes due to freezing, acting solely or together to destabilise the slope.	“snow”, “extreme”, “freeze”, “ice”, “cold”
Freeze–thaw (temperature change cold to hot), snowmelt	Failure of slope materials in response to temperature rise, including landslides triggered by the melting of snow or permafrost (in a non-volcanic setting).	“snow”, “melt”, “permafrost”, “spring”, “temperature”
Volcanic eruption	Landslides (and mudflows) occurring in a volcanic environment triggered by volcanic activity such as explosions and volcano-tectonic seismicity. This does not include events in active volcanic environments triggered by rainfall.	“volcan”, “seismic”, “activity”, “eruption”
Marine erosion	Triggered by sea erosion (only) repeat wave impact.	“coast”, “sea”, “erode”