



Urban expansion towards hillside along torrents over the past three decades.

Debris flows took place in almost all torrents, killing 73 persons on 20 August 2014.

Source: Field investigation of the 20 August 2014 Hiroshima debris flow disaster, Hiroshi Fukuoka, Research Institute for Natural Hazards and Disaster Recovery, Niigata University, Japan

Photo.1 Hiroshima City, Japan



Source: wikipedia



Source: Taken by the author

Left: Caracas/Venezuela. Urban areas developed on hill sides slopes.

Right: Guatemala City/Guatemala. Urban areas developed on the banks of deep gorges.

Photo.2 Examples of major cities with large urban areas developed on hazardous slopes