

Land-surface environment of a deep-seated landslide zone in a relatively stable phase

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Because deep-seated landslides frequently prepare relatively gentle hillslopes associated with deep soil and plenty groundwater supply, deeply slid zones in hilly countries tend to be used for various purposes including agriculture and forestry in a relatively long duration of dormant slide movement. The land-surface environment of deeply slid zones in dormant phase is, however, not investigated yet so in detail. A case study was carried out in a detached zone of a deep-seated landslide situated in the low mountains composed of schist in Chichibu, central Japan. The zone is densely but shallowly dissected by narrow streams, each of which has own pipe as the source of water. Runoff from pipes differs by both time after rain and water pathway in landslide deposits and overlying solum, which is classified into several subtypes of brown forest soil. Growth of *Cryptomeria japonica* planted c. 40 years ago is different by micro-landform units which reflect soil moisture and land-surface stability. The micro-landform units in the zone are considered as a result of stream erosion and associated minor mass-movements. Water flow deviated from streams and overflowed from seepage zones in times of heavy rain performed the development of a rill on road surface. The above observations suggest that the land-surface environment of a deeply slid zone in dormant phase is fundamentally controlled by the condition of surface water concentration and disperse which prepare both surface- and soil-water conditions and land-surface stability.