

Analysis of Channel Geometry and Sediment Transport in Palung and Chitlang Watersheds Using GIS

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ABSTRACT

Channel geometry and sediment transport have been analyzed using Geographic Information System and statistical methods in Palung and Chitlang sub-watershed of Kulekhani watershed located in the Central Hills of Nepal, which covers 87.9 sq. km of land surface.

The study demonstrates that the channel geometry and sediment transport changes abnormally in downstream distance for both rivers, though there are some controlling factors i.e. lithology, land use, climate, vegetation cover etc.

Key words: Channel geometry, discharge, GIS, landscape, River morphology