

# Assessments of the Effect of Land-use change on Groundwater Storage in Kathmandu valley

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## ABSTRACT:

Assessment of land use change impacts on groundwater storage was performed in Kathmandu Valley basin of 651 km<sup>2</sup>. Effect of land use change was found to be more in groundwater than surface water. Increased impervious area due to land use change has been major factor in contributing to decreased infiltration. The ground water storage is depleting due to the fact that the extraction of groundwater to fulfill the demand of rapidly growing urbanization and the portion of the water infiltrating for groundwater storage is reduced due to increased in surface imperviousness.

*Keywords:* Land use change, groundwater storage and water balance

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