# Hydrology and Sediment Loading In A Degrading Natural Lake System In Malaysia

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**ABSTRACT**
Hydrology and suspended sediment loading in the catchment of the natural Chini Lake (second largest natural lake in Malaysia) was investigated. Suspended sediment loads and discharge from seven selected feeder rivers were measured over a period of 1 year from January to December 2006. The river water flow rate during the sampling periods was relatively low, ranging from 0.001 to 1.31 $m^3/s$ or an average of 0.21 $m^3/s$. The highest and lowest stream flow discharge rates were recorded from the Gumum and Cenahan River sub-catchment areas, respectively. The amount of sediment load ranged from 0.49 to 166.02 $kg/km^2/day$ or an average of 30.57 $kg/km^2/day$ in the study area. The highest sediment load was recorded in the wet season and the lowest in the dry season. Anthropogenic activities have significantly affected the hydrological functions and availability of the suspended sediments, and have thus influenced the variation in sediment output in the study area.

**KEYWORDS**: Watershed; Feeder river; Discharge; Sediment load; Chini Lake; Pahang; Malaysia

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