## <u>P1A-4</u>

## FLOW CHARACTERISTICS OF THE TASIK CHINI'S FEEDER RIVERS, PAHANG, MALAYSIA

## Muhammad Barzani Gasim, Mohd. Ekhwan Hj. Toriman, Zulfahmi Ali Rahman, Mir Sujaul Islam & Tan Choon Chek

School of Environment and Natural Resource Sciences Faculty Science and Technology, Universiti Kebangsaan Malaysia, 43600 Bangi, Selangor, Malaysia.

## ABSTRACT

The hydrological assessment of the seven Tasik Chini feeder rivers was carried out between October and December 2004, February, March and April 2005 to assess the total stream flows for maintaining the Tasik Chini to its level. A total of nine sampling stations were selected in this study, namely: Datang River, Cenahan River, Hilir Gumum River, Mid Gumum River, Kura-kura River, Melai River, Hilir Kuala Merupuk River, Hulu Kuala Merupuk River, and Jemberau River. The annual rainfall in the study area ranges from 1488 to 3071mm or 124 to 256 mm/month. The stream flow rate during the sampling days varied from 0.033 to 0.9083m<sup>3</sup>/sec during wet season and from 0.0042 to 0.2448m<sup>3</sup>/sec during dry season or average of 0.1674 m<sup>3</sup>/sec. Water analysis based on three water quality parameters such as turbidity, TSS and TDS proved that the water bodies in the upstream area were polluted by physical activities. Results of TDS range from 22.67 to 184 mg/L, TSS (1.17 - 79.11 mg/L) and turbidity (4.67 - 28.67 NTU). Recent activities such as mining, deforestation, agricultural, and residential activities have taken place in the surrounding areas of the lake. These activities were causing environmental degradation such as changing of hydrological characteristics of the Tasik Chini.