

**Water balance of various land use patterns at Sakaerat Environmental  
Research Station, Nakhonratchasima.**

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Thesis. Kasetsart University., 1984.

**ABSTRACT**

Water balance was investigated in various land use patterns, dry evergreen forest, dry dipterocarp forest, mixed land use and a swidden area at the Sakaerat Environmental Research Station (SERS), Nakhon Ratchasima from January 1982 through December 1983. Evapotranspiration was determined by deducting the amount of streamflow, leakage and soil moisture change from the amount of rainfall.

The annual water balance in term of rainfall (mm) streamflow (mm), leakage (mm), and evapotranspiration (mm), respectively, the last three also expressed as a percent of total rainfall, mixed land use and the swidden area, respectively, is fractionized as : 1,261.6, 64.4 (5.1), 43.2 (30.4), 814.0 (64.5); 1,145.6, 16.6 (0.6), 383.9 (33.5), 755.4 (65.9); 1,298.0, 144.4 (11.1), 395.8 (30.5), 1757.8 (58.4); 1,401.1, 470.8 (33.4), 230.4 (10.4), 708.9 (50.2). Dry dipterocarp forest showed greatest evatranspiration, followed by dry evergreen forest, mixed land use and the swidden area, respectively.