

Water balance of various land use patterns at Sakaerat  
Environmental Research Station (SERS).

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**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 stream-flow, leakage and soil moisture change from the amount of rainfall.

The annual water balance in terms of rainfall (mm) stream-flow (mm), leakage (mm) and evapotranspiration (mm), respectively, the last three also expressed as a percent of total rainfall, in the dry evergreen forest, dry dipterocarp forest, mixed land use and the swidden area, respectively, is fractionized as : 1,261.6, 64.4 (5.1), 383.2 (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), 757.8 (58.4); 1,401.1, 470.8 (33.4), 230.4 (10.4), 708.9 (50.2). Dry dipterocarp forest showed greatest evapotranspiration, followed by dry evergreen forest, mixed land use and the swidden area, respectively.