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THANONGSAK LAMOONKIJ: A STUDY ON THE FOREST
RESOURCE MANAGEMENT IN HUAI SAI ROYAL DEVELOPMENT STUDY
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The research objectives were studied the plan and measurement of forest resource management in Huai Sai Royal Development Study Centre at Phetchaburi province as a royal thinking and the master plan of centre in 1998-2001 and to seek environmental factors which relate the forest resource in this area.

To compare land utilization in past and presence time was used to analyse with GIS method. The secondary data of environmental factors, forest resource ,was used to determine zoning plan so as to consist in royal thinking and master plan of the Huai Sai Royal Development Study Centre

The results showed that after the ecosystem recovery plan under plantation planning was started in 1991-1998, the agricultural area (pineapple) was converted to mix forest plantation and mixed deciduous forest with *Shorea siamensis* Miq.. The forest type relation was divided into 3 zones as, 1) mixed deciduous forest with *Shorea siamensis* Miq. zone, 2) mixed plantation forest zone and 3) mono plantation forest zone. In the mixed deciduous forest with *Shorea siamensis* Miq, the tree importance value index was *Shorea siamensis* Miq. , sapling importance value index is *Shorea siamensis* Miq. and seedling importance value index was *Leucaena leucocephala* de Wit. These zones were divided into two canopy levels ,as medium and expansion level, and they have >4.5 cm.(DBH) of frequency distribution with L-shape and constant succession. The stand of this zone has two categories , 1) the stand of Khao Sawai-Kapee 2) the stand of Khao Kapuk, Khao Boe-King and Khao Thong . In the mixed plantation forest zone, the tree importance value index was *Leucaena leucocephala* de Wit., the same as sapling and seedling.

The connection factors with the forest resource were contour level, water utilization, and soil fertilization. The forest management planning was determined in 5 zones as, 1) conservation zone, 2) forest recovery zone, 3) maintenance plantation zone, 4) economic development zone, 5) agroforestry promotion zone. Implementation of nine plans that consist in the royal thinking master plan in 1998-2001 were also suggested.