

**Land use patterns in Sakaerat Environmental Research Station, Ampkoe Pak  
Thongchai, Changwat Nakhonratchasima.**

PRAMUK KAEONIAM.

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**ABSTRACT**

The objectives of the study was to determine the future trend of land use in Sakaerat Environmental Research Station (SERS) by using Markhov Chain model. In the study, the present and previous change of land use have been analysed by using the aerial photograph, scale 1 : 15,000 taken in 1975 with field check in 1981. The socio-economic conditions of inhabitants in the area, which related to the land use pattern and change, have also been investigated through the questionnaire.

Present land use in 1981 can be classified into 5 categories : dry evergreen forest, dry dipterocarp forest, bamboo forest, swidden area, and agricultural area covering 29.54, 12.22, 1.51, 30.73 and 8.74 square kilometers, respectively. The previous change of land use can be seen from the decrease in area of dry evergreen forest, dry dipterocarp forest, and bamboo forest by 2.17, 1.43 and 0.03 percent per year, respectively, and by the concomitant increasing in area of swidden and agricultural areas of 14.18 and 22.30 percent per year.

As to prediction of future land use from 1966 to 2066, dry evergreen forest will be depleted from 63.43 percent in 1966 to 0.71 percent in 2066, dry dipterocarp forest from 18.31 percent in 1966 to 0.71 percent in 2066, dry dipterocarp forest from 18.31 percent in 1966 to 0.20 percent in 2066, bamboo forest 1.91 percent to 1.78 percent. But the competing land use as swidden and agricultural areas will increase from 15.75 and 0.65 percent in 1966 to 85.12 and 12.09 percent in 2066, respectively.

Evidence from the socio-economic survey shows that there are 11 clusters of 110 families, averaging 4.48 persons per family. The total population is 493 persons, 247 males and 246

females. Land holding are used mostly for growing corn and cassava and have an average size of about 37.27 raise per family. The inhabitants have an average income of about 10,039 bahts per family per year. This is a per capita income of about 2,240 with average expenditure of 9,121 baht per family per year and 519 bahts of saving. However, most of the people are in debt 52.70 percent due to loan for farming, 44.90 and 2.40 percent due to loan for family expenditure and health care.