

Tanawat Praphai 2008: Application of Geo-Informatics for Assessment of Invasive Risk Prone Protected Area and the Surroundings of Kengkrachan National Park.  
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The objectives of analysis an invasive risk prone protected area of Kengkrachan national park are to study land use change in protected area and to study influential factors of invasion protected area with GIS and Logistic Regression Analysis techniques.

The result of study land use change in protected area of Kengkrachan national park and 3 kilometers radius of the surrounding area approximate 4,198.07 km<sup>2</sup> in during 13 years (1992-2005) found that forest decreased 85.73 km<sup>2</sup>, reservoir increased 2.13 km<sup>2</sup>, farm crop increased 108.61 km<sup>2</sup>, horticulture area decreased 55.43 km<sup>2</sup>, community area increased 13.61 km<sup>2</sup>, grove and abandon field increased 16.81 km<sup>2</sup>. Land use changed during 13 years indicates to forest area has change to farm crop and community area.

The analysis of relation between an invasive area and physical factors found that significant factor consist of slope, distant from community, distant from road, and distant from reservoir. In addition, the invasive risk prone protected areas are classified into 3 levels as low, moderate and high invasive risk that includes 76.16%, 3.49% and 20.35% accordingly in this study.

The study results can be utilized for administration and management of protected areas of Kengkrachan national park. It can also be applied to other protected areas through the country.



Student's signature



Thesis Advisor's signature

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