

Chiratchaya Khongthone 2011: Application of Geomatic Data for Proving Land Occupation and Land Use of Phetchaburi Rajabhat University, Pong Salod Campus, Ban Lat District, Phetchaburi Province. Master of Science (Forest Resource and Environmental Administration), Major Field: Forest Resource and Environmental Administration, Interdisciplinary Graduate Program. Thesis Advisor: Assistant Professor Weeraphart Khunrattanasiri, Dr.rer.nat. 120 pages.

This research aimed to create the land use maps in the area of Phetchaburi Rajabhat University at Pong Salod Campus before and after the year 1996 by integrating the geomatic data together with the interpretation of aerial photograph and high resolution satellite data. The boundary was overlaid on aerial photomap which set a map scale at 1: 4,000 to produce the original map. By using geographic information system (GIS) software for mapping data analysis, the land use maps were created in year 1953, 1967, 1976, 1983, 1994, 2003 and 2009 and they were used for proving land occupation and land use of people's land claimed inside the study area. The shape and size of each land parcel was surveyed by the government officers from the Forest Resources Management Office 10 (Ratchaburi) together with Land Development Department and the land parcel data was imported into the geographic information system. Then though to process land claim mapping by GIS method, the data were analyzed by mean of overlapping data (overlay) data on land use map and people land claim map together. The first case was focused to prove the land occupation and land use which occurred before year 1972 when the Yang Hug Kho Pum National Forest Reserve was established, using aerial photo and data of 1976 and the second case was aimed to prove the land occupation and land used which occurred before year 1996 when Phetchaburi Rajabhat University started to develop the area using aerial photo and data of 1994.

The result showed that Phetchaburi Rajabhat University covering an area of 1,451 rai 1 ngan 9 square wah. The land use maps of year 1953, 1967, 1976, 1983, 1994, 2003 and 2009 contained five land use categories: urban and built-up land, agricultural land, forest land, water body and miscellaneous land. There are 69 cases of people claiming possessory or 81 land parcels area which covered and area 1,200 rai 2 ngan 73 square wah. The area of 1,025 rai 60 square wah located inside the study area and the area of 175 rai 1 ngan 13 square wah located outside. The area of 426 rai 49 square wah was no people represent their own right. One land parcel appeared outside the study area and 59 land parcels located inside. Twenty-one land parcels located on the border line of study area. In year 1976, there were 2 land parcels with full utilization, 35 parcels with partial utilization and 43 parcels had no human activities. In year 1994, there were only 4 land parcels with full utilization, 42 parcels with partial utilization and 34 parcels with no human activities. To investigate the continually of land utilization from year 1953 until 2009 it appeared that 43 land parcels had no human activities above, 35 parcels had partial utilization and only 2 parcels with full utilization.

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Thesis Advisor's signature