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        PATAMAPORN LIHNGUAN : LAND USE ZONING FOR PIG FARMING A CASE

STUDY OF AMPHOE BANGKHLA, CHACHOENGSAO PROVINCE.   THESIS ADVISOR :

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        The investigation aims to study land suitability and zoning for pig farming in Amphoe Bangkhla, Chachoengsao Province. At the same time, this study also suggests the guidelines for zoning of pig farms. The selected factors for land evaluation are physical factors, socio-economic factors and environmental factors influencing condition for pig farming. The above factors are risk of flooding, suitability for paddy, surface water resources, road network and land prices. The criteria for pig farm zoning are legally restricted areas, buffer zones for water resources, and archeological-historical site. Furthermore, the database were established from the mentioned factors and criteria. The results were presented in the form of report and maps, which were used as the guideline for determining the appropriate land utilization measures, pig farm management and environmental impact reduction.

        The zoning of the study area are classified into 5 zones. First, the preserved area with the overall of 40.74 km^2 or 17.86 % of study area. Second, the conserved area, vital of natural resources and the environment, is about 36.55 km^2 or 16.02 % of study area. Third, class I, highly suited for pig farming the area of 13.05 km^2 (5.72%). Forth, class II, moderately suited for pig farming the area of 48.25 km^2 (21.15 %). Fifth, class III, lowly suited for pig farming the area of 89.65 km^2 (39.25 %). Furthermore, the guidelines on land management in each zone and pig farm management were suggested for the reduction of wastewater and sewage discharge into natural water system.

        The zoning and data analysis are operated by the application of MapInfo.