

Thesis Title Information System for Cropping System
Design : Case Study of Huai Nam Chone
Irrigation Area, Kao Hin Sorn Sub-district,
Phanomsarakam District, Chachoengsao.

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ABSTRACT

The present thesis is concerned with the creation of information system for cropping system design. The persons who involve with the information output are cropping pattern or cropping system designers and landuse planners.

In this study, the area of Huai Nam Chone Irrigation, Kao Hin Sorn Sub-district, Phanomsarakam District, Chachoengsao are selected. The work includes data collection, field survey, system structure design, and data manipulation to produce the desired output.

These information are the products of the system which links between Geographic Information System (GIS) and Database Management Information System (DBMS). Both ILWIS (Integrated Land and Watershed Management Information System), used for GIS, and ORACLE, used for DBMS, can run on micro computer.

The information which are the output of this study are divided into spatial information, non-spatial information, and graphic information. Spatial information consist of farm potential map, site potential maps, map of farmers' reasons for selecting crops, landuse map, and map for soil conservation measures. Non-spatial information consist of farm database, economic crop database, soil database, soil conservation measure database, and climatic database. Graphic information are monthly rainfall and evaporation graphs, and agricultural water supply graph.