

4036782 ENIM/M : MAJOR : INFORMATION MANAGEMENT ON ENVIRONMENT AND
NATURAL RESOURCE;

M.Sc. (TECHNOLOGY OF INFORMATION SYSTEM MANAGEMENT)

KEY WORDS : INFORMATION SYSTEM / AQUACULTURE / IRRIGATION ZONE

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FRESHWATER AQUACULTURE IN IRRIGATION ZONE. A CASE STUDY OF HUAI SANAENG
IRRIGATION PROJECT, CHANIANG DISTRICT, MUANG DISTRICT, SURIN PROVINCE) THESIS

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Ph.D. (Fisheries) 105 P. ISBN 974-665-024-6

The main objective of this research was to develop an information system to support development and management of the aquaculture in an irrigation zone. Information Systems are created to meet the information needs of their users, so that informed decisions can be made and the appropriate actions taken. The information required are : numbers and areas of fish culture, farm management, irrigation water supplies, water utilization, fish production, farm site, and culture areas. Data from 59 farms were interviewed and then computerize to be information system.

This system was designed with direct input by the end users and the system data services satisfy the end users' information requirements. Linear regressions were used to predict fish productions and water requirements for aquaculture.

The analysis and design system was developed by studying the regional fishery officers and irrigation officers' management method of using data. Microsoft Access 97 provides the information storage for the information system. This software was used to create the database which stores factual and numeric data. Microsoft Visual Basic version 6.0 was used to create the graphic user interface (GUI) and it is fully compatable with the Windows 98 operating system. Evaluation of the system was done by the regional fishery officers and irrigation officers.

The Research results showed that the information system covered the main information to direct user necessary. There are perfectly information and efficency convenient to information organization.

Finally, it is recommended that this information system could be developed more precisely, and it could be applied to other irrigation areas and they also could be up-date the existing information of the studied areas.