

Thesis Title Economic Evaluation of Electrical Pumping
Irrigation Project:A Case Study of Nakhon
Si Thammarat Province.

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ABSTRACT

Availability of water resource is the key factor to an production in agricultural sector, especially in the area of rice cultivation. The Electrical Pumping Irrigation Project, carried out by Development and Promotion of Energy Department, had took a great role in providing water supporting the cultivation of farmers throughout the country.

The aim of this study is to study and economically evaluate the project performance of the Electrical Pumping Irrigation Project in Nakhon Si Thammarat province

The data is collected from documents belonging to agencies concerned, interviewing of officers concerning to

project performance and interviewing of farmers who lived in project area and nearby. Total cases of samples farmer are 314 cases, 125 cases are farmers who cultivated in irrigated area of project and 189 cases are farmers who cultivated in non-irrigated area.

Results of the study revealed that the project performance isn't economic enough because of the inactive in agricultural undertaking of farmers. During dry season, 51.5 % of wet season irrigated area were used for rice planting only. The other causation of uneconomic of project performance is the unfull steam undertaking of project in some area because of the invasion of seawater.

The results of economic evaluation revealed that the Benefit-Cost ratio (B/C ratio), Net Present Value (NPV.) and Internal Rate of Return (IRR.) is 0.73, - 9,006,921 baht and 8.48 % respectively.

As considered from each stations, it is found that the project performance at Ban Bon is only economically viable while the rest (Ban Bo Lo, Ban Ram, Ban Bang Nop Ban Bang Rai and Ban Si Kak) are uneconomic.

However, the project implementation had also provided other benefits which can't be used in an economic indicators calculation because they can't be express in monetary term.