4037903 ENAT/M: MAJOR: APPROPRIATE TECHNOLOGY FOR RESOURCE

DEVELOPMENT; M.Sc. (APPROPRIATE TECHNOLOGY FOR

RESOURCE DEVELOPMENT)

KEY WORDS

: POTENTIAL / ATTITUDE / AGRICULTURE / NEW THEORY

AGRICULTURAL PRACTICE

USANEE THOOPTONG: THE POTENTIAL OF LAND AND PUBLIC ATTITUDE FOR THE ROYALLY – INITIATED NEW THEORY AGRICULTURAL PRACTICE: EXPANDED AREA OF KHAO DIN – PATTANA AND PUENG – ROUNG SUBDISTRICT, CHALERM PHRA KIET DISTRICT, SARABURI PROVINCE. THESIS ADVISORS: SOMPONG THONGCHAI M.Sc., CHARLIE NAVANUGRAHA Ph.D, SANCHAI SUTIPANWIHAN M.Sc. 161 p. ISBN 974-664-764-4

The New Theory Agricultural Practice is a project initiated by His Majesty the King to promote modern agricultural methods in Saraburi Province and the purpose of this research is to study the potential of land for implementing the New Theory Agricultural Practice, to study attitudes and the factors related to the attitudes of implementing the New Theory Agricultural Practice. It also involves studying the natural resources involved by secondary data including geographical features, climate, soil and water resources for the New Theory. Data was collected by interviewing heads of 35 households from the sample group. The statistics used are percentage, mean, maximum, minimum, standard deviation, analysis of covariance and multiple classification analysis.

The results of research revealed the potential of land for implementing the New Theory agricultural practice. The area studied is flat for agricultural activities. The soil unit of 15 occurred as a result of freshwater silts. The soil texture is made up of clay loam or silty clay loam. With this type of soil, drainage capacity is poor and therefore more suitable for paddy farming than field crops cultivation during the rainy season. Another area is made up of 52 B soil unit which is very shallow. The texture consists of clay loam soil in the upper layer and that of clay and cemented modules of calcium carbonate in the lower layer. Fertility level is medium to high which would be suitable for growing field crop types with shallow root penetration. Average rainfall is 1,290.40 millimeters per year with little underground, so water needs to be supplied from Huai Hin Khow Resevoir. The public attitude for the royally-initiated New Theory Agricultural Practice found that all heads of households have a high attitude level for this practice. It was also found that income apart from agriculture related to the attitude of implementing the New Theory Agricultural Practice at a significant level of 0.05.

Recommendations indicated from this study are that support for the irrigation system should be given in order to provide an adequa to supply of water into the farmers' plots and at an amount suitable for the crops under the New Theory Agricultural Practice and it is important that knowledge is provided to the farmers on a continual basis as a guideline for carrying out these Practice. Previously, farmers' knowledge of the New Theory was limited to phase I, that is, digging up a pond and to members of the project who attended training only. It is only the minority part which is aware of the phase II of the New Theory, that is, unifying as a group or cooperatives.