

Phatsavanh Xayyavong 2012: Water User's Group on Irrigation Management: A Case Study Nongdaeng Project, Saravane Province, Lao PDR. Master of Engineering (Irrigation Engineering), Major Field: Irrigation Engineering, Department of Irrigation Engineering. Thesis Advisor: Associate Professor Bancha Kwayuen, Ph.D. 153 pages.

The purposes of the research were to study 1) general and socio-economic status of farmers 2) knowledge and understanding about irrigation water management of farmers 3) participation level of farmers in irrigation water management and 4) factors that were related to farmers' participation in irrigation water management. The farmers living in Nongdaeng Irrigation Project were the sample of this study. The outcome was evaluated by using t-test and F-test with statistical significant level of .05.

The result of the study revealed that Nongdaeng Irrigation Project has only been used for rice cultivation, 100 % sticky rice. The irrigation water managing system is the responsibility of water user's group and government sector co-managing format however the water user's group will be more responsible to the system than government sector like setting up some regulations which were agreement within their group, irrigation system protection, irrigation system maintenance, operation planning, fee collecting, punishment for offenders, solutions for other problems of the project, etc. while government sector will give them suggestions, technical support and evaluation after the end of growing season. All along 15 years of this project, even there were good practice formats in provincial level but observation on operation in the past, it showed that the managing system was lack of technical format.

Most of farmers grew backyard garden in their own land and relied on some plants and animal from forest or river for cooking. Farmers planted rice twice a year; first time from the beginning of November to February, using irrigation water and second time from May to October, using rain water because of the abundant rainfall (about 1800 – 2000 millimeter per year) in this area. About existing water supply evaluation, the research revealed that there was enough water for planting but cultivated area expansion was limited because the project area situated in remote area with no market, low density of population and short of labor to handle with the whole area in addition the water user's group was also lack of technical knowledge, insufficient training, no experience from site visit in other area so they could not manage irrigation water well enough.

Keywords: Participation in irrigation water management, Nongdaeng Project, Lao PDR.

Student's signature

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