

Comparison between a WUA and two IWUGs

– Case studies in the Chao Phraya Delta, Thailand -

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1. Introduction

Water User Association (WUA) has been introduced since 1963 and Integrated Water User Group (IWUG) approach has been initiated since 1989 in Thailand by the Royal Irrigation Department (RID). However, a report by a related division of RID (WMDG, RID 2005) showed that after establishing and having water users' Organizations (WUOs), most of them are collapsed quickly by the time. Many WUOs have too few activities. However, the research on WUOs in Thailand has not been extensive. It is, therefore, not clear to responsible people what the real problems of WUOs are. The question of RID officials that how the WUOs can be sustainable in the long run, is kept in their minds.

An Integrated Water User Group 18R canal (IWUG 18R canal) has been promoted since 2000 by Modernization of Water Management System (MWMS). This group was reported that the establishment and strengthening are well successful (Onimaru et al., 2003). However, there are still the second generation problems (Teamsuwan, 2006).

An IWUG Sao Hi Unity Agriculture Irrigation (IWUG SHUAI) that got award of the best National WUOs from the Thailand's King in the year 2005, has been praised by RID as a successful example of transparent financial management and farmer cooperatives in irrigation management. Water User Association Ban Rom (WUA Ban Rom), which got the same award in 1990 and 1998, was established in 1969 by RID. They are examples of WUA and IWUG, which can survive in a long term. Thus, the past experiences how they perform and how social mobilization systems are effective for the success of IWUG SHUAI and WUA Ban Rom can be good lessons for improving irrigation management in Thailand.

2. The objective

The purpose of this research is to examine and analyze the activities of the IWUG SHUAI, and the WUA Ban Rom, compared with IWUG 18R canal, in order to know the reason of their success in the long run.

3. Study area

The study areas are basically covered by 3 national operation and maintenance project (O&M project) in the Chao Phraya Delta. Three pilots study areas are shown in Fig.1. First, IWUG 18R canal (2,640 ha) is for the 18R canal, Khok Kathiam O&M project (KKOM) located in the middle portions of Chainat- Pasak main irrigation canal. Second, IWUG SHUAI (3,003 ha) is for the 1R Sao Hi lateral canal, Khlong Phrieo-Sao Hi O&M project (KPSHOM), a pumping irrigation project, located in the tail portions of Pasak River. Third, WUA Ban Rom (3,210 ha) is for the 1R-24 R canal located in the tail portions of Chainat-Pasak main irrigation canal in the Roeng Rang O&M project (RROM).

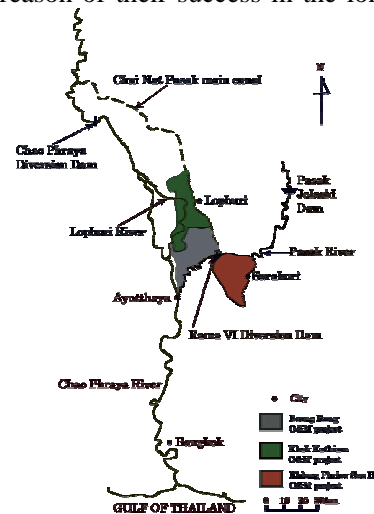


Fig. 1 The study area

4. Methods

The on-farm water management system was surveyed to know their actual activities from the beginning to up to the present moment. The observation of the present activities of IWUG SHUAI and WUA Ban Rom compared with IWUG 18R canal such as operation, maintenance works, financial management and organizational management was performed. Furthermore, a questionnaire was used as the main tool for collecting basic data. The core of the questionnaires was to examine attitudes of the farmers toward irrigation management of WUOs and real performance of these WUOs.

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5. Results

5.1 Why the management of IWUG SHUAI (pumping irrigation project) is successful?

1) Contracts on the pumping electricity fees

Before delivery of irrigation water in a dry season, five leaders of IWUG SHUAI will make a valuable contact with KPSHOM project that IWUG SHUAI is fully responsible for the electricity fee of pumping water from Sao Hi Pumping station currently controlled by KPSHOM project from the beginning of second rice crop to the successful end of that crop. Then, IWUG SHUAI holds the general meeting to explain the new policy and hit an acceptable agreement with all members.

2) The remuneration to increase the incentive of the committee members

The remuneration of the committees comes from many ways; for example; 1) the committee of IWUG SHUAI can get the meeting allowance for attending the delegates meeting about 3.8 US\$/time. 2) Water distribution sub district section can receive the allowance for collecting pumping electricity fee about 0.8 US\$/ha. 3) The water distribution section can get the service charge from members about 0.8 US\$/ha for measuring the cropping area. In addition to Chief of water distribution sub district section can fully obtain the gasoline cost and mobile cost for monitoring the result of water distribution.

3) Monitoring cropping area

In the dry season only the members who use irrigation water in each water distribution section pay for the pumping electricity cost. The cropping area in each section will be close checked and measured by committee members from other sections.

4) Financial Management

The members, who want to grow second rice crop, have to pay for at least 80% of cultivated area at before sending water. In case of some farmer cannot pay the electricity fee at 80%, they have to sign the loan for the remaining payment. The interest rate of loan is 2 % per month.

5.2) Comparison between two WUOs in gravity irrigation projects and a WUO in pumping irrigation project

1) Water management system

An irrigation project can be divided into two types of gravity and pumping. First, a gravity irrigation project is the preponderant case in RID because operational cost is not expensive. Second, pumping irrigation project is performed in areas higher than water source. The O&M cost for pumping irrigation project is high on account of using electricity or gasoline and by reason of high maintenance of pumping station.

2) Group establishment process

The establishment processes of WUA Ban Rom and IWUG 18R canal were intervened by RID officials in top-down fashion. Thus, WUA Ban Rom and IWUG 18R canal did not come from the real needs of the farmer unlike IWUG SHUAI, which was established by farmer themselves in a bottom-up approach.

3) Farmers incentives to pay the fee

The members of IWUG SHUAI realized that if they do not pay an electricity fee for pumping to IWUG, KPSHOM will stop pumping water to 1R Sao Hi canal according to the contracts between KPSHOM and IWUG's leaders. In cases a gravity irrigation project in which all farmers know and believe that project offices will surely send irrigation water to them. Although the farmers in IWUG 18R canal and WUA Ban Rom do not pay the fee they can always take water when water passes to their plot because there is no law to force them to pay the fee.

4) Performance measures

The performance measures of IWUG SHUAI are the best. Furthermore, the value of performance measures of IWUG 18R canal is so similar to WUA Ban Rom.

6. Conclusions

IWUG SHUAI is active and sustainable in the long run on account of their spontaneous incentives affected from pumping irrigation system. Its management system has continuously developed the sense of common interests within the group. The members realized that if IWUG cannot gather pumping fees enough to guarantee that IWUG can bear the electricity cost, KPSHOM will not pump and send irrigation water to them. On the other hand, the pumping cost is very high and cultivated area is so small in a dry season.

The command from RID is inevitable. There is no hope for WUOs in the gravity irrigation project in a consequence of a low incentive of the peasants to participate in WUOs. The shortcoming of them needs to be improved by the RID's policy.