

Analysis of Management of Integrated Water User Group -A case study in the Chao Phraya Delta, Thailand- 農民水利組合連合の活動分析 - タイ国チャオプラヤデルタにおける事例研究

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1. Introduction

A participatory approach to Water User Association (WUA), which empowers farmers, has been introduced since 1963 in Thailand by the Royal Irrigation Department (RID). However, past records have unveiled that the majority of Water Users' Organizations (WUOs) are not successful in cooperation among water users, especially in the viewpoint of conflict resolution between upstream and downstream farmers. Integrated Water User Group 18R canal (IWUG 18R canal) in Lopburi Province has been promoted since 2000 by Modernization of Water Management System (MWMS) Project, which was carried out by RID in cooperation with the Japan International Cooperation Agency (JICA). This IWUG development was under an idea of functional role sharing between farmers and government, and simultaneous establishment of WUGs.

2. Objective

The purpose of this research is to analyze the actual activity results of the IWUG 18R canal after its establishment. It clarifies the characteristics of irrigation management in IWUG, thus giving a basic idea for better management of IWUG in a practical way.

3. Study area

The study area is 18R canal, the first canal of the Khok Kathiam operation and maintenance project (KKOM) located at the upper-east bank of the Chao Phraya Delta. It is located on the middle portions of Chainat Pasak main irrigation canal. Irrigation area of 18R canal is on the right side of the main canal. It occupies irrigable area of 2,640 ha with a total length of 9.97 km. The study area can be divided into Khok Kathiam sub-district in the upstream and Bang Li sub-district in the downstream.

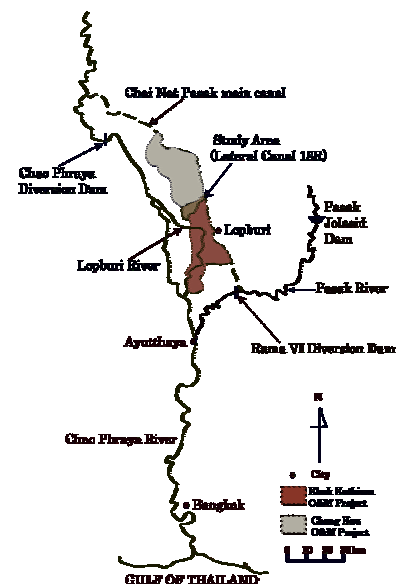


Fig. 1 Khok Kathiam O&M Project

4. Methods

An idea of functional role sharing based on 4-processe theories (Sato, 2001) have been

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applied to analyze the water distribution cooperated with the RID. It clarifies the characteristics of irrigation management in newly IWUG with analytical viewpoint of four functional processes; decision, operation, monitoring and feedback.

5. Results and Discussion

5.1 Inequitable water distribution

The result of flow rates measurement indicates that WUGs both upstream and downstream could take water from 18R canal. However, upstream WUGs enjoyed more water than downstream area.

5.2 Lack of water measuring

Turn out is operated by each WUG; although the water is distributed in a block rotation system for upstream and downstream. The uneven water distribution is occurring. Downstream farmers always complain to IWUG and KKOM office; however, there is not a strong monitoring system, without measuring the actual water use.

5.3 Lack of downstream farmer's participation

Downstream farmers did not have incentive to join the first general meeting because the venue was far from their homes and they were not informed how it was important. Thus, majority of voters were upstream farmers and the delegates meeting has been occupied and controlled by upstream farmers for protecting their lion's share

5.4 Lack of Financial Management System

Most of downstream WUGs did not send the money to IWUG. The ratio of collecting fee for the whole area was going down from 30.5% in 2002 to 15.5% in 2005. It was not only collected fee in downstream area decreasing, but also collected fee in upstream area was also going down because of poor accounting and bookkeeping practices.

5.5 Lack of ownership on irrigation infrastructure

The budget was not effectively used for maintenance of the ditches. The farmers lack for ownership on irrigation infrastructure because they have not participated in planning, design, construction and cost sharing of irrigation facilities. In addition, the farmers who are not members of WUOs can take water freely from the same water source.

5.6 Incompetent controlling of cropping area

KKOM office has set and tried to control strictly cropping area in dry season; in the reality the plan could not be fulfilled because IWUG and KKOM could not control farmers to reduce cropping area

6. Conclusions

The present state of IWUG 18R canal is, therefore, not deemed to be sustainable in the long term. There are still the second generation problems. For example, the water distribution, which was discussed without monitoring, was unfair for downstream area. There is no clear equal water allocation principle developed in the IWUG. Hence, majority of downstream farmers do not want to cooperate with IWUG and so on.