# Summary of Terminal Evaluation

I. Outline of the Project			
Country: Lao People's Democratic Republic		Project title: Participatory Irrigated Agriculture Development Project in Southern Area along the Mekong River	
Issue/Sector: Agriculture Development		Cooperation scheme: Technical cooperation	
Division in charge : Rural Development Dep.		Total cost: 377 million Yen	
Period of	R/D: November 2010 to November 2015 (5 years)	Implementation Organization: DOI of MAF, PAFO <sup>1</sup> and DAFO of Savannakhet Province	
Cooperation		Supporting Organization in Japan: None	

# 1. Background of the Project

The Department of Irrigation (DOI), Ministry of Agriculture and Forestry (MAF) started to introduce Irrigation Management Transfer (IMT) policy which transfers both ownership of irrigation facilities and duties of their management to Farmer's Organization's such as Water Users Association (WUA) / Water Users Group (WUGs). However, because of the insufficient technical guidance to WUA/WUG by the government, various management problems happened in water distribution and facility maintenance.

Although the Lao PDR Government developed "Irrigated Agriculture Sub-sector Strategy 2011-2020" aiming for transferring current traditional agriculture to commercialized one so as to enable WUA/WUG to collect enough water fee for sustainable use of the facilities, there are a lot of challenges to attain the objectives of this strategy.

The Southern Areas along the Mekong River, especially Savannakhet province, has a great potential to realize ideal WUA/WUG because of its favorable farming condition as well as market potential based on its geographical location. Based on above background, JICA Technical cooperation project "Participatory Irrigated Agriculture Development Project in Southern Areas Along the Mekong River" (hereinafter referred to as "the Project") was formulated aiming to develop capacity of both government officials and farmers on (1) Participatory Irrigation Management as well as (2) Improved farming practice for promoting commercialized agriculture including rice in model sites in Savannakhet province.

# 2. Project Overview

# (1) Overall Goal

Participatory Irrigated Agriculture approach is promoted at other irrigation areas in Southern Areas along the Mekong River.

# (2) Project Purpose

Capacity of government officials and farmer's organizations for participatory irrigated agriculture is strengthened in Savannakhet Province.

(3) Outputs

- 1) Implementation team for participatory irrigated agriculture development at the Savannakhet Provincial office and DAFO office in the model sites functions appropriately.
- 2) Main, secondary canal systems are renovated or improved and on-farm canal system in the model sites are constructed and properly operated and maintained by the FOs in cooperation with PAFO/DAFO and Village officials.
- 3) Corresponding to the progress of farmer organization and improvement of canals, quantity and selection options of commodity crops including rice is increased.
- 4) Management capacity of Farmer's Organizations in the model sites is strengthened for participatory

<sup>&</sup>lt;sup>1</sup> PAFO: Provincial Agriculture and Forestry Office, DAFO: District Agriculture and Forestry Office

irrigated agriculture.

5) Guideline for participatory irrigated agriculture compiled through the project activities is publicly known inside and outside the province.

#### (4) Inputs

Japanese side: Total cost 377 million Yen (Accumulated disbursed amount as of March 2015) Expert: long-term 6 persons, short-term 14 persons in total Equipment: 30 million JPY Local cost: 100 million JPY Trainees received in Japan: 44 persons

Lao PDR side:

Counterpart: 50 persons Land and Facilities: Offices, meeting rooms and others Local Cost: 5,429 million Kip

#### II. Evaluation Team

Members of	Japanese Side				
Evaluation	Leader: Kazuo Shimazaki, Executive Technical Advisor to the Director General, Rural				
Team	Development Dep., JICA				
	Irrigation Management: Masahide Yoshida, Rural Development Bureau, Ministry of				
	Agriculture, Forestry and Fisheries, Japan				
	Planning Management: Hiroaki Imai, Deputy Assistant Director, Team 1, Group 1, Rural				
	Development Dep., JICA				
	Evaluation Analysis: Toyomitsu Terao, Fisheries Engineering Co., Ltd				
	Laos Side				
	Mr.Chanthaneth SIMAHANO, Team Leader, DDG of Planning and Cooperation Dep /MAF				
	Mr. Pasonexay INSISIENGMAY, Acting Director of Planning and Cooperation Division/DOI				
	Mr. Sisavanh CHANTHAVONGSA, Deputy Director of Irrigation Section/PAFO				
	Mr. Somekhit KAOYAHOUANG, Senior Officer, DIC/MPI				
	Mr. Vongsavanh VONGKAYSONE, DD of International Cooperation Division/MAF Mr. Leokham VILAYVANH, Planning and Cooperation Division/DAEC				
Period of Evaluation	1 June 2015 to 19 June 2015	Type of Evaluation : Terminal evaluation			
	II. Depute of Evolution				

III. Results of Evaluation 1. Project Performance

Output 1 Implementation team for participatory irrigated agriculture development at the Savannakhet Provincial office and DAFO office in the model sites functions appropriately *Indicators* 

1-1.PAFO/DAFO officials and farmers identify and discuss problems of irrigation and farming. 1-2.Number of application form for participatory irrigation work submitted by DAFO based on coordinated plan and implementation of irrigation work and farming.

The Output 1 has been achieved.

The task force team that consists of the government organizations involved in the Project in Savannakhet Province (SVK) was set up. Through the framework, PAFO/DAFO officials and farmers became capable of identifying and discussing problems of irrigation and farming. Since the Mid-term Review in July 2013, eight (8) participatory irrigation applications have been submitted covering all project sites. For all of these, the application forms have been submitted through the farmers' participatory process.

Output 2 Main, secondary canal systems are renovated or improved and on-farm canal system in the model sites are constructed and properly operated and maintained by the FOs in cooperation with PAFO/DAFO and Village officials

#### Indicators

2-1.PAFO/DAFO officials conduct survey, design, expense estimation and construction control for

participatory construction works in cooperation with village office

2-2.As many farmers participate voluntarily in construction works of main, secondary canal renovation or improvement and on-farm canal construction.

2-3. The number of PAFO/DAFO, Village officer, and farmers who passed the field-test for on construction works of main, secondary canal renovation or improvement and on-farm canal construction is 68 persons.

The Output 2 has been almost achieved. The PAFO/DAFO and village officials have been able to jointly conducted preliminary studies for participatory irrigation works, surveying, design, cost estimates and construction management. Until April 2015, a total of 8,908 persons (including 2,215 women) from the WUG/WUA in basis of person-day has engaged themselves in unpaid labour work and for renovation of the main and secondary canal and also for construction of new on-farm canals. The "field test" was conducted for the purpose of measuring understanding of the personnel involved in on the technical subjects of canal repairs, maintenance management and water management. And 32 people passed the test. The training for the remaining people will be continued, and a re-test is planned in order to achieve the target number 68.

Output 3 Corresponding to the progress of farmer organization and improvement of canals, quantity and selection options of commodity crops including rice is increased *Indicators* 

3-1.PAFO/DAFO effectively use the results of soil survey, cropping pattern survey and market survey for their own works.

3-2.Model farmers who understood market system and can sell their agriculture products smoothly reaches more than 50 farmers.

3-3. The number of major highly profitable crops and vegetables increases from 5 kinds (\*1) to 10 kinds. (\*1) Present main highly profitable crops: rice, maize, chili, cucumber, and peanuts

The Output 3 is expected to be achieved by the end of the Project.

PAFO and DAFO utilized the result of the soil survey, the cropping pattern survey, and the market survey through the project implementation. The number of model farmers who understood market system and can sell their agriculture products smoothly reached 43 (target 50). The number of major highly profitable crops and vegetables increases from 5 kinds to 11 kinds.

Output 4 Management capacity of Farmer's Organizations in the model sites is strengthened for participatory irrigated agriculture.

Indicators

4-1. Internal rules (\*2) of farmer organizations are improved in the all organizations

4-2. More than 20 of farmers' leaders can manage the FOs (\*3).

4-3. WUA/WUG collects & disburses Irrigation Development Fund (IDF) appropriately

(\*2) The regulation includes an organization structure, rules and TORs and record of meeting

(\*3) Farmers' Leader's competency: (ex.) Able to compile issues and needs of farmers, to present those issues and needs to outside of the group

The Output 4 has been achieved.

All target WUG/WUAs amended the articles of association by themselves, which were approved by the general meetings in 2014 except Gnot Huai Bak which had been under the direct control of the government. The number of farmers' leaders who can manage the FOs reached 25 (target 20). The water charge collection rate has increased from about 50% to 90 %. The areas where farmers feel they receive sufficient water have expanded owning to better management of water distribution. The Project promoted introduction of the audit for WUG/WUAs. Four WUG/WUAs prepared the account report in 2014 fiscal year, and the accounting that includes cost and revenue was presented to the general meeting for approval.

Output5 Guideline for participatory irrigated agriculture compiled through the project activities is publicly known inside and outside the province.

Indicators

5-1. The number of stakeholders who understood the draft of participatory irrigated agriculture

### increases.

# 5-2. The Guideline is approved by MAF.

# The Output 5 is expected to be achieved by the end of the Project.

Through a process for its drafting, the Guideline will be circulated not only to the counterpart personnel but also to the provincial officers, DOI of the MAF, and the four provinces (Kammouane, Savannakhet, Salavan, and Champasak). Upcoming schedules are; late in July 2015: the introductory workshop in Savannakhet Province, September 2015: 4 provinces consultation, November 2015: MAF approval.

### 2. Evaluation Results

#### (1) Relevance: high

The Irrigation Law in June 2013 clarified the role of WUA, DAFO, PAFO and DOI in each work through planning to operation and maintenance of the irrigation facilities. The Project contributes to the smooth implementation of the Irrigation Law by developing the process to materialize the participatory irrigation management through capacity development for the organizations involved.

# (2) Effectiveness: high

The Project Purpose is expected to be achieved as Output 3 and 5, which require further progress, are to be achieved by the end of the Project. The effectiveness of the Project was increased because the Project focused on strengthening farmer's organizations, which was the right strategy to encourage farmers to undertake coordinated and integrated works.

# (3) Efficiency: moderate

Though some delay in the activities were observed due to lack of a long term expert for farming system and also to the huge flood damaged irrigation facilities in the model sites in 2011, most of the inputs have been done as planned. As a result, the Project has successfully attained farmer's participation as much as totals 8,908 farmers in person-day basis under the planned inputs.

#### (4) Impacts: moderate

The importance of the Guideline is increasing as the participatory approach is required under the Irrigation Law. The Project will raise awareness and interest of the three other provinces in Southern Areas along the Mekong River through the guideline preparation process subject to further human resource development and allocation of the necessary budget by the Lao Government.

#### (5) Sustainability: expected to be moderate

<u>Policy aspect</u>: Since the participatory irrigation work needs much less cost, this approach is effective for promoting the maintenance work. In this point, the participatory approach can earn the continued support from the Lao Government.

<u>Institutional aspect:</u> The Project is going to prepare the guideline for participatory irrigation management to be applied to 3 other provinces in Southern Areas along the Mekong River (Kammouane, Salavan, Champasak). However, the implementation capacity of the provincial and district government officials in these provinces should be raised by the government of Laos under coordination by DOI.

<u>Technical aspect</u>: The continuation of the Project activities by PAFO/DAFO in the model sites after the Project can sustain the technical assets. The officers of PAFO/DAFO are aware of the necessity of such efforts of them.

<u>Financial aspect</u>: The Savannakhet Province is assigned as one of the 10 priority provinces which the budget from National Food Security Program (2015 to 2025) is to be allocated. The budget can be used for procurement of material, which is the biggest cost for the current participatory approach. By utilizing the fund, financial sustainability is expected to a certain extent.

#### 2. Factors that promoted materialization of effects

- (1) The WUG/WUA has played critical role in participatory work which requires farmers to provide their labor for free of charge. The Project was well designed to provide necessary trainings for the WUG/WUAs.
- (2) The Workshop for Mid-term Review of PIAD's Activities was jointly held by all the WUG/WUAs in February 2013. The Project also started to focus on strengthening WUG/WUAs in November 2013. These two events gave the momentums. Afterwards, the Project successfully attained strong commitment by farmers in participating irrigation rehabilitation work.

### 3. Factors that impeded materialization of effects

- (1) The initial project approach called "cascade approach" in which Japanese experts train trainers in PAFO, PAFO trainers train DAFO, and DAFO implement participatory scheme did not work well. DAFO could not successfully generate understanding of farmers. In the later phase of the Project, Japanese experts started to support DAFO directly in collaboration with PAFO.
- (2) Huge flood damaged irrigation facilities in the model sites in 2011 and the Project should spend their resources for urgent rehabilitation of the facilities, including main and secondary canals. This caused delay in the project implementation.

#### 4. Conclusion

Almost all activities have been completed. Participatory Irrigated Agriculture approach was introduced and well understood by farmers. WUG/WUAs are actively participated in canal improvement. It is expected that the Project Purpose will be achieved by the end of the Project.

#### 5. Recommendations

(1) From Lao evaluation team

- i) To ensure the ability of transfer knowledge to PAFO and DAFO officers of four provices. Training/seminar/workshop should be organized by the Projectt at least one time before project termination.
- ii) In the remaining time of the project, all activities should be completed as PDM set up.
- iii) After termination of the Project, due to lack of budget, the Lao government will seek a budget including support from donors to maintain and disseminate the project activities.

(2)From Japanese evaluation team

- i) In order to achieve the Overall Goal, the DOI should prepare an implementation plan and schedule of a post project plan by the end of the Project.
- ii) The DOI, with the support by the chief advisor/institutionalization, should assign the responsible officials and procedure on each step for finalization of the Guideline.
- iii) PAFO should secure budget for the existing model sites for further development of irrigation facilities. The Project Team should conduct the capacity building for the current CP personnel so as to transfer knowledge to PAFO and DAFO in other districts in Savannakhet Province and the three other provinces at least one time before project termination. The DOI should provide support to PAFO of these three provinces for understanding and budgeting of the participatory approach.

#### 6. Lessons Learnt

- (1) Under the circumstance in which the government agricultural extension body is still weak, the approach to give necessary advice at the interface between DAFO and farmers was more effective than the "cascade approach" in which Japanese experts train PAFO, and PAFO trains DAFO who then trains farmers.
- (2) For technical transfer, it is necessary to correctly assess the capacity of the implementing body in advance to avoid assuming that the implementing body does something what it cannot do.