Internal Ex-Post Evaluation for Development Planning Project

conducted by Thailand Office: February, 2019

Country Name Kingdom of Thailand	**Project for flood countermeasures for Thailand agricultural sector**

I. Project Outline

Background	From the end of July 2011 and into 2012, Thailand experienced a massive flood in the Chao Phraya River basin. Although the Government of Thailand established two committees to deal with long-term measures, the Government had provided limited measures for the benefit of the agricultural sector. After the discussion between the needs assessment survey team dispatched by Japan and the Government of Thailand, recovery of damaged pasture for livestock sector, rehabilitation of irrigation facilities and mitigation planning which involves community peoples were identified as areas for Japan's support. As to the livestock sector, it was found that many small-scale farmers were not able to secure the feeding stuff after the flood, and therefore the sustainable system for supplying feeding stuff was needed. Regarding the irrigation facilities, although the Royal Irrigation Department (RID) grasped the degree of damages, the root causes and countermeasures accordingly were not identified. As for the mitigation planning, designing mitigation plan at community level was needed. Under these circumstances, based on the request of the Government of Thailand, JICA decided to conduct this project titled "Flood Countermeasures for Thailand Agricultural Sector."
Objectives of the Project	1. Expected Goals through the proposed plan[1]: (1) Based on the recommendations by the project, policy and implementation preparation for the support for prompt recovery of damaged pasture is progressed by the Government of Thailand; (2) Based on the recommendations by the project, The Government of Thailand implements rehabilitation and reinforcement of irrigation facilities, and establishes system for rehabilitation/reinforcement in response to flood; and (3) Based on the guidelines developed by the project, local governments other than the project area implement mitigation plans for flood damage. Expected utilization of the proposed plan by the project: 2. Expected utilization of the proposed plan: (1) Department of Livestock Development (DLD) prioritizes the policy/programs for support for recovery of damaged pasture and prepares budgets; (2) Royal Irrigation Department (RID) acknowledges the mid-term and long-term direction of rehabilitation and reinforcement of irrigation facilities; and (3) The guidelines on disaster-resilient agriculture and agricultural community is acknowledged as the direction of local governments, and plans in accordance with the guidelines are drawn up in local governments other than the project area.
Activities of the Project	1. Project Site: Flood damaged area in upper stream of Chao Phraya River and the Chao Phraya Delta in central region: (1) Component 1: 49 provinces, (2) Component 2: Whole area as described above, (3) Component 3: Model area: Eight Tambons[2] from Phitsanulok (Chum Saeng Songkhram, Nakhon Pa Mak), Chainat (Wang Man, Khao Kaeo), Pra Nakhon Si Ayutthaya (Gop Chao, Singhanat), Pathum Thani (Kholong Ha) and Nkhon Pathom (Naraphirom) provinces 2. Main activities: (1) Component 1: Submitting direction of support for recovery of damaged pasture (2) Component 2: Making proposal for direction of rehabilitation and reinforcement of irrigation facilities (3) Component 3: Drawing up the guidelines on disaster-resilient agriculture and agricultural community 3. Inputs (to carry out above activities)

[1] The degree of achievement of expected goals is not to be assessed in principle at the time of ex-post evaluation, since it is defined as the medium-to-long-term goals which will be attained as a result of crystallizing the proposed plan ("output" of the project).

[2] Local government units in Thailand

	Japanese Side 1) Mission members: 23 persons 2) Equipment: Equipment necessary for carrying out the study 3) Local cost: Expenses for implementation of model projects		Thai Side 1. Staff allocated: unknown 2. Land and facilities: Office space
Project Period	March 2012 to July 2013 (The kick-off meeting was organized on March 28, 2012.There was a letter saying that the project implemented completely on July 2013)	Project Cost	(ex-ante) 480 million yen (actual) 471 million yen
Implementing Agency	Overall coordination: Ministry of Agriculture and Cooperatives (MOAC) Component 1: Department of Livestock Development (DLD) Component 2: Royal Irrigation Department (RID) Component 3: Office of Agricultural Economics (OAE)		
Cooperation Agency in Japan	SANYU CONSULTANTS INC., NIPPON KOEI CO., LTD.		

II. Result of the Evaluation

<Constraints on Evaluation>

・ The information collected for ex-post evaluation was very much limited because personnel reshuffle and resigning

1 Relevance

<Consistency with the Development Policy of Thailand at the Time of Ex-Ante Evaluation and Project Completion>

The project was consistent with the development policy of Thailand both at the time of ex-ante evaluation and project completion. At the time of ex-ante evaluation, the Strategic Committee for Water Resource Management (SCWRM) headed by deputy prime minister/finance minister was discussing the mid-term to long-term water resource management among the measures for flood damages. Master plan for water resource management announced by SCWRM on January 2012 aimed at developing infrastructure for water resource management including flood control basin, and therefore the project was consistent with the master plan. At project completion, as to the Component 1, one of the three important issues raised in the government policy on the livestock sector for 2011-2012 was "to maintain animal feed stocks and to establish a system to supply feed in times of natural disasters". With respect to Component 2: RID annually formulated the Medium-Term Expenditure Framework (MTEF) plan as a 6-year expenditure proposal for all RID projects/works for the operation, maintenance and improvement of irrigation systems and integrated water resources management. MTEF included water hazard prevention and mitigation through dam improvement, monkey cheeks[3] and drainage system. With respect to Component 3: Thai Government set up the action plan of integrated and sustainable flood mitigation in Chao Phraya River basin for preparedness of the transportation during flood and formulation of plan for assistance and recovery of flood victims both during and after flood situation in Master plan on water resources management in January 2012.

<Consistency with the Development Needs of Thailand at the Time of Ex-Ante Evaluation and Project Completion >

The project was consistent with the development needs of Thailand for recovery measures from the flood both at the time of ex-ante evaluation and project completion. The project was implemented as Thailand experienced a massive flood in the Chao Phraya River basin and needs for recovery of damaged pasture for livestock sector, rehabilitation of irrigation facilities and mitigation planning were identified. At project completion, RID and relevant governments are considering implementing projects for countermeasure against flood disaster as social needs for flood countermeasure are still high. As to Component 1 and Component 2, measures were being taken including recovery measures and prevention work to assist people affected from flood damage, compensation, and setting up of a committee for assistance and infrastructure rehabilitation to increase the average of farmer's income.

<Consistency with Japan's ODA Policy at the Time of Ex-Ante Evaluation>

The project was also consistent with Japan's ODA Policy. The environmental management and water disasters are listed as the areas for cooperation under Japan's Economic Cooperation Program for the Kingdom of Thailand (May

[3] The purpose of monkey cheek is both flood control and water utilization. Monkey cheek can be lowlands, flood-prone areas, tributaries, swamps, or ponds that are inundated every year. Flood water is stored in the wet seasons and is released for irrigation from the beginning of the dry seasons.

2006).

<Evaluation Result>

In light of the above, the relevance of the project is high.

2 Effectiveness/Impact

<Status of Achievement for the Objectives at the time of Project Completion>

During the project period, direction of support for recovery of damaged pasture was submitted (Component 1), direction of rehabilitation and reinforcement of irrigation facilities was proposed (Component 2), and guidelines on disaster-resilient agriculture and agricultural community planning were drawn up (Component 3) under the final report of the project.

No record was confirmed on whether JICA officially sent the final report to MOAC and MOAC accepted it. However, according to reply from DLD and OAE, they had accepted the final report from JICA. Besides, because MOAC had uploaded the report in Thai language version on their website, it is supposed that the final report had been sent to all counterparts at the completion of this project, although the record to have been sent has not been reserved. Therefore, the status of achievement for the objective at the time of project completion has to be interpreted as partially achieved.

< Utilization Status of the Proposed Plan at the time of Ex-post Evaluation>

The recommendations made for Component 1 during the project were as follows. (1) Strengthening forage production and storing, and reviewing/establishing the feed supply system for emergency situation so that flooded areas are supported by supplies of stored feed from non-flooded areas. (2) Identification of flooding and non-flooding areas based on a simulation study, and estimation of the number of livestock. (3) Estimation and construction of hay storage. (4) Hay storage monitoring by DLD headquarters (monitoring of the status of feed stored in 29 Animal Nutrition Research and Development Center (ANRDCs). (5) Further capacity building of livestock farmers. (6) Replacement of agricultural machinery at ANRDCs. After the project completion, to improve and standardize roughage and forage crop production as the Good Agricultural Practices (GAP) for commercialize and value added of the products, recently, MOAC established the GAP for Pangola Grass[4] in order to obtain quality Pangola Grass, suitable for animal feed. At the time of ex-post evaluation, Bureau of Animal Nutrition Development of DLD has tried to promote and propagate the GAP for Pangola Grass to farmers. GAP Pangola Grass was being promoted and propagated just in some area as a pilot project. GAP of other grass and further implementation need more plan and both of financial and technical support.

With respect to Component 2, according to interview with RID, Thai Government has constructed and repaired the ponds and canals in Bangban, Pakhai and Ayudhaya to decrease velocity of run-off to river as more effective way instead of the way of recommendation by the project on flood countermeasure by use of irrigation canals as flood waterway

Regarding Component 3, OAE Zone 2 (Phitsanulok province) and OAE Zone 7 (Chainat province) have acknowledged the guideline as the direction of local governance. According to OAE, OAE distributed the guidelines to other 12 provinces (32 Tambons) and several Provincail Agricultural and Cooperative Offices. And the plan in accordance with the guideline has been made in Phitsanulok province and Chainat province.

<Status of Achievement for Expected Goals through the Proposed Plan at the time of Ex-post Evaluation>

As to Component 1, DLD has implemented the measures to improve the capacity of productivity and reserve in line with the recommendations in the projects by annual budget, although all six recommendations have to be incorporated into policies/programs. Budget is on yearly requested base. With respect to Component 2, RID has implemented almost all of recovery projects, so average of farmer's income has increased in 2013-2016. Furthermore, RID considers to carrying out the project of countermeasure against flood disaster under the Master plan which was formulated based on the recommendation of this project by another JICA's cooperation. With respect to Component 3, at the time of ex-post evaluation, no plan was formulated in other provinces. OAE has to continue to follow up the progress toward formulation of the plan in the other provinces, in cooperation with Provincial Agriculture and Cooperatives Offices, which are core regional administration in area level to work together with Special Project and Planning Bureau of MOAC which has a role to implement and coordinate with internal and external related agencies

<Other Impacts at the time of Ex-post Evaluation>

No land acquisition and resettlement occurred under this project, and no negative impact on natural environment was observed. The information on the status of RID related impacts was not obtained.

<Evaluation Result>

In light of the above, through the project, the objectives were partially achieved at the time of project completion. Component 1 has been somewhat progressed in terms of utilization of the plan and attainment of expected goals through the utilization of the project. Component 2 has been almost achieved and, RID considers implementing the projects for countermeasure against flood disaster. Component 3 has to follow up progress in other provinces

Therefore, the effectiveness/impact of the project is fair.

3 Efficiency

[4] The Pangla Grass was distributed by the project during the project period and proposed for cultivation.

Both project cost and project period were within the plan (ration against the plan: 98%, 100%). Therefore, the efficiency of the project is high.

4 Sustainability

<Policy Aspect>

RID's Strategies 2012-2017 mentions that water hazards prevention and mitigation is a significant strategy and RID allocates a lot of budget to carry out this task. Moreover, under the strategies, the Government of Thailand considers implementing the projects while putting high priority in the countermeasure against flood disaster. DLD has to formulate the policy for reserve of forage against flood disaster in collaboration with Component 3, even if DLD has some policy about improvement of productivity. Regarding Component 3, OAE and other agencies relevant to disaster prevention have to collaborate with together and manage to be promoted formulation of the plans in other provinces.

<Institutional Aspect>

Under DLD, Bureau of Animal Nutrition Development is responsible for (1) Research & Development of Animal Nutrition and Forage Crop, (2) Improvement and Extension of Animal Nutrition and Forage Crop Technology, (3) Production of animal fodder for supportive farmer during disaster. In DLD's recognition, although DLD has 216 staff members and the number is stable, the personnel is insufficient considering the current increasing trend of workload.

Regarding the operation of water management, under RID, the Smart Water Operation Center (SWOC), the relevant institution to sustain the project effects, is responsible for monitoring and collecting weather data, water situation, water storage in main dams. 15 staff members are allocated, but the number is not sufficient. However, the Government of Thailand puts high priority in the countermeasure against water flood management, so it is expected that institution against flood disaster will be strengthened in RID and other relevant agencies.

In order to extend the guideline, OAE transfer assignment to Provincial Agriculture and Cooperatives Offices which are core regional administration in area level to work in cooperation with Special Project and Planning Bureau of MOAC which has a role to implement and coordinate with internal and external related agencies

<Technical Aspect>

No information was obtained on the technical level of the organizations of DLD, RID and OAE. and therefor, the sustainability in terms of technical aspect is not able to be verified.

<Financial Aspect>

Expenditure on items for water hazards prevention and mitigation of DLD and RID are as follows. The budget is sufficient as RID are able to complete all activities as reported in the final report. No information is obtained on the sufficiency of budget of DLD. Therefore, the sustainability in terms of financial aspect is not able to be verified.

Revenue and expenses of water hazards prevention and mitigation of DLD and RID

(Unit: million Bhat)

	2012	2013	2014	2015	2016	2017
1. Organization Name: Bureau of Animal Nutrition Development, DLD						
Revenue	-	-	-	-	-	-
Expenditure	113	125	120	143	159	
2. Organization Name: Royal Irrigation Department						
Revenue	-	-	-	-	-	-
Expenditure	5,803	3,497	4,645	6,682	9,210	

<Evaluation Result>

In light of the above, there is partly a little unclear information on the sustainability of the project effects in terms of the policy, institutional, technical, and financial aspects. Therefore, the sustainability of the effectiveness through the project is fair.

5 Summary of the Evaluation

During the project period, direction of support for recovery of damaged pasture was submitted (Component 1), direction of rehabilitation and reinforcement of irrigation facilities was proposed (Component 2), and guidelines on disaster-resilient agriculture and agricultural community planning were drawn up (Component 3) under the final report of the project. However, whether or not the final report was officially accepted by MOAC was not clear. The recommendations on Component 1 has somewhat progressed. Regarding Component 2, the Government of Thailand has implemented almost all of recovery project and considers carrying out further countermeasure against flood disaster. With respect to the recommendation on Component 3, OAE has to continue to follow up of formulation of the plan in other provinces even if the plans were set up in Phitsanulok province and Chainat province.

As to the Sustainability, there is partly a little unclear information on the sustainability of the project effects in terms of the policy, institutional, technical, and financial aspects.

Considering all of the above points, this project is evaluated to be satisfactory.

III. Recommendations & Lessons Learned

Recommendations to Implementing Agencies

As a general remark, at the time of ex-post evaluation, we partly got a little limited information. Therefore, the final report of the project needs to continue to be handed over staff members in the implementation agencies to obtain sustainability. Recommendation for each component are following below.

Component 1: The implementing agency continues their activities, but the budget is on requested yearly base. Therefore, these activities have to be implemented with incorporating into policies/programs about six recommendations of the project.

Component 2: RID has already implemented almost all of rehabilitation of irrigation facilities, and RID has set up SWOC to operate water resources, but staff is limited under RID's recognition. Thai Government puts high priority in water resources management, so it is desirable that water resources management will efficiently be carried out in the RID and relevant agencies.

Component 3: OAE has to continue to follow up the progress of formulation of the plan in other provinces in collaboration with relevant agencies, even if the plans were set up in Phitsanulok province and Chainat province.