

JBIC ODA Loan Project Mid-Term Review

Time of Mid-Term Review Field Survey: June 2006

Project Title: Thailand: “Project for Revitalization of the Deteriorated Environment in the Land Reform Areas through Integrated Agricultural Development (Stage I) (L/A No. TXXIII-10)

[Loan Outline]

Loan Amount/Contract Approved Amount/Disbursed Amount: 3,617 million yen/2,125 million yen/1,703 million yen (end June 2006)

Loan Agreement: Entered September 1998

Loan Completion: Six years following issuance of loan agreement (January 2005, extended to January 2008)

Executing Agency: Agricultural Land Reform Office (ALRO) of the Thai Ministry of Agriculture and Cooperatives

[Project Objective]

The objective of this project is to foster integrated agriculture in four land reform provinces in northeast Thailand (Mukdahan, Sakon Nakhon, Maha Sarakham, Khon Kaen) by supporting the construction of farm ponds, the repair of farm roads, and the introduction of micro-irrigation for farmers who have received farming rights on cultivated land by ALRO, and thereby contribute to bettering the lives of farmers in the target regions, help them become independent, and strengthen the overall community through farmer group activities aimed at “capacity development.” In addition, by conducting this project, the goal is to restrain the use of protected forests adjoining the farms, and thereby contribute to forest conservation.

Consultant: A joint venture comprised of Sanyu Consultants forming the nucleus together with TEAM Consulting Engineering and Management Co., LTD. (Thailand) and another four companies.

Contractor: All Thai enterprises (Ludee Prayong Co., Ltd., Sahabun Engineering Co., Ltd., ESRI (Thailand) Co., Ltd., Umphon Engineering Co., Ltd. etc.)

Item	Results of ex-ante evaluation (March 2001)	Ex-post evaluation results as estimated at time of mid-term review
[Relevance] (1) National policy level	In its Eighth National Economic and Social Development Plan (1997-2001), it shifts its focus from economic development of Bangkok, Metropolitan Area which was promoted under up to the Seventh Plan. Instead, decentralized economic activity and the development of local and rural villages became urgent government policy themes.	In Thailand’s Ninth National Economic and Social Development Plan (2002-2006), poverty reduction was a prominent issue. Northeastern region the northeast is poor and has traditionally been a focus of support in the agriculture sector. In addition, the “Sufficiency Economy” advocated by the king upon the economic crisis of 1997 suggests that the people should spend what they can afford.
(2) Policy level	Based on the above, from the standpoint of creating jobs for employees following the 1997 currency crisis, the Ministry of Agriculture and Cooperatives established the Economic Policies and Measures by the Ministry of Agriculture and Cooperatives, which was approved by the cabinet in 1998, as a way to promote rural development. Moreover, in the Land Reform Act enacted in 1975, it aims to promote distribution of land to poor farmers in Northeastern region who had no land title, establishment of agriculture management, and improvement of peoples’ livelihood.	Thailand’s Ninth Agricultural Development Plan (2002-2006) stipulates that the government should promote economic and social stabilization and independence of farmers through helping them improve the quality of their lives. According to the plan, it should also establish farmers development networks to strengthen farmer-run organizations while conforming to the region’s local wisdom and traditional knowledge and culture. The present project is designed to farmers become independent through integrated agriculture, and as such can be said to conform to government policy.

(3) Planning level	The present project was designed to promote integrated agriculture by providing farm ponds and other basic agricultural infrastructure to farmers in the land reform area in northeast Thailand. As such the project was a matter of high priority.	The present project was conducted in accordance with initial plans which were based on a feasibility study by Japan International Cooperation Agency. Although certain revisions were made, work on basic infrastructure such as farm ponds and farm roads have proceeded as planned. It continues to strengthen networks among farmers by developing local markets and fostering leaders in the community.																																			
[Effectiveness]	<p>(1) Operation and Effect indicators</p> <p>Quantitative effects</p> <p>At the time of the ex-ante evaluation, no indicators were set. However, JICA feasibility figures were recorded below under Output as baseline estimates for such things as the number of farm ponds, etc.</p> <p>1) Operation indicators</p> <p>Number of farm ponds provided, length of farm roads serviced, dam- or pump-based irrigation area.</p> <table><tr><td></td><td>Initial target (July 1998)</td></tr><tr><td>1) Number of farm ponds provided</td><td>10,714</td></tr><tr><td>2) Number of farm ponds expanded</td><td>1,607</td></tr><tr><td>3)Number of community ponds provided</td><td>20</td></tr><tr><td>4) Length of farm roads (km)</td><td>504</td></tr><tr><td>5)Irrigation area (rai)</td><td>13,800</td></tr><tr><td>6)Locations targeted for micro-irrigation</td><td>NA</td></tr></table>		Initial target (July 1998)	1) Number of farm ponds provided	10,714	2) Number of farm ponds expanded	1,607	3)Number of community ponds provided	20	4) Length of farm roads (km)	504	5)Irrigation area (rai)	13,800	6)Locations targeted for micro-irrigation	NA	<p>(1) Operation and Effect indicators</p> <p>Quantitative effects</p> <p>The indicators below were set based on the project’s work contents.</p> <p>1) Operation indicators</p> <p>Number of farm ponds provided, length of farm roads, dam- or pump-based irrigation area, number of micro-irrigation projects conducted.</p> <table><tr><td></td><td>Revised targets (January 2005)</td><td>Present (May 2006)</td></tr><tr><td>1) Number of farm ponds provided</td><td>4,232</td><td>4,089</td></tr><tr><td>2) Number of farm ponds expanded</td><td>649</td><td>396</td></tr><tr><td>3) Number of community ponds provided</td><td>29</td><td>23</td></tr><tr><td>4) Length of farm roads serviced (km)</td><td>830</td><td>828</td></tr><tr><td>5) Irrigation area (rai)</td><td>5,519</td><td>5,457</td></tr><tr><td>6) Locations targeted for micro-irrigation</td><td>1,624</td><td>1,623</td></tr></table> <p>Note 1: See below for figures for each target province.</p> <p>Note 2: Revised figures were set based on the past result achieved by the time that extension of the yen loan expiration date was being considered.</p> <p>Note 3: 1 rai = 0.16ha</p> <p>Note 4: Micro-irrigation was added to the plan in December 2002.</p> <p>There is a wide gap between the initial target figures and the revised ones e.g., as the number of farm ponds. When the topographical map was put together, it was determined that there were many farm water surfaces, a great</p>		Revised targets (January 2005)	Present (May 2006)	1) Number of farm ponds provided	4,232	4,089	2) Number of farm ponds expanded	649	396	3) Number of community ponds provided	29	23	4) Length of farm roads serviced (km)	830	828	5) Irrigation area (rai)	5,519	5,457	6) Locations targeted for micro-irrigation	1,624	1,623
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		<p>deal of land for public use, and community forests. Furthermore, ponds could only be developed on farmlands for which farming rights had been granted and considerable time was needed between the application for farming rights and its approval, which caused significant change in the target number (there are no plans to build new farm ponds). At present, the forecast is that the revised targets will be attained for the development of farm roads, irrigation, and micro-irrigation.</p> <p>To protect forests, the government grants legal permission for farmlands and prevents the destruction of forests through illegal expansion of farmland. However, no measurements have been taken to assess the quantitative effect of these measures.</p> <p>2) Effect indicators</p> <p>While the present project has partly contributed to raising farmer incomes through higher production due to micro-irrigation or dam-based irrigation, the Thai government and executing agency (ALRO) have focused on transitioning from rain-fed agriculture dependent on a solitary crop—such as rice, cassava, or sugar cane—to a more integrated and independent form of agriculture. In other words, the main purpose of the present project is not increasing income per se, but rather on having people learn to resolve their own problems—the emphasis being on raising the farming communities’ capacity by developing integrated farm agriculture.</p> <p>In addition, the state of pond usage, the number of networks that village leaders are participating in actively, and the number of community markets were established as indicators. The state of farm pond usage is to be judged according to four grades (excellent, good, fair, to be improved) set by ALRO for farm ponds built under this project. (Details are attached below.) Because the loan expires in January 2008, the target figures are the figures confirmation of objectives will take place at the time of the ex-post evaluation (estimated).</p>
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		<p>Number of networks in which village leaders are taking an active role.</p> <table> <tr> <th>Number of target villages (tambons)</th><th>Number of village leader networks active in the tambons (June 2006)</th><th>Number of village leader networks active at the time of the ex-post evaluation (January 2010)</th></tr> <tr> <td>33</td><td>28</td><td>28</td></tr> </table> <p>Note 1: A tambon is an administrative unit at the village level in Thailand. Note 2: See below for figures by target province.</p> <p>With support from Village Foundation, a Thai NGO, village leader activities have been developed. A part of those activities take the form of an organization named In Pang, which has regional span. However, rather than having entire tambons act under their leaders, it is organized by the farmer farmers who support their leader's guidance.</p> <p>Number of community markets established</p> <table> <tr> <th>Number of target villages (tambons)</th><th>Number of community markets (June 2006)</th><th>Target number of community markets at time of ex-post evaluation (January 2010)</th></tr> <tr> <td>33</td><td>8</td><td>18</td></tr> </table> <p>Note: See below for figures by target province.</p> <p>The number of community markets is increasing in response to the heightened demand for organic farming. In addition, some tambons are sending a team to study community markets in other tambons, and are setting up similar markets of their own. It is expected that they will be reaching their targets.</p> <p>(2) Factors which may influence the effectiveness and impact</p> <ul style="list-style-type: none"> • Institutionalization of village leaders. Shifts from organizations composed only of farmers who agree, to those in which all of the target village's farmers participate. • Maintenance of expanding community markets. Currently, many villages are sending a team to study community markets, and there is a need to disseminate the markets' management methods. 	Number of target villages (tambons)	Number of village leader networks active in the tambons (June 2006)	Number of village leader networks active at the time of the ex-post evaluation (January 2010)	33	28	28	Number of target villages (tambons)	Number of community markets (June 2006)	Target number of community markets at time of ex-post evaluation (January 2010)	33	8	18
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		<ul style="list-style-type: none"> • Withdrawal from integrated agriculture a shift to the farming of solitary crops. There is a chance that some will withdraw from the practice of integrated agriculture by turning towards the easier-to-maintain solo crop cultivation such as cassava. Others may relinquish farmlands on account of increased chances for other sources of income. • Stagnation of farm income due to sluggish crop prices. This includes a drop in prices due to overproduction of particular crops. <p>(3) Factors which may influence the sustainability While the items in (2) above affect project effectiveness or impact, they also have a direct or indirect effect on sustainability.</p> <ul style="list-style-type: none"> • Transfer of control of operation and maintenance to each target village. Control of operation and management for farm roads, community ponds, dams, and pump stations is being transferred to each target village. But because the operation and maintenance fees for individual target villages are insufficient, operation and maintenance may not be conducted continuously. • Sustainability of integrated agriculture and successorship. There is a trend for the younger generation to head to the cities in search of education and a better life, and the population of those engaged in agriculture is aging. Given this, it is vital that the attraction of agriculture itself be heightened, and secure a new generation as a capable successor.
Information for reference	Results of ex-ante evaluation (March 2001)	Ex-post evaluation results as estimated at time of mid-term review
[Efficiency] (1) Outputs	(1) Outputs 1) Basic agricultural infrastructure (a) Construction of new farm ponds (approx. 10,000 locations/1,200m ³ scale) (b) Expansion of existing farm ponds (approx. 1,600 locations) (c) Community ponds(20 locations/100,000m ³ scale) (d) Construction of farm roads (approx. 500km, 6/4/3 m wide) (e) Construction of irrigation facilities (f) Making of 1/4000-scale maps 2) Procurement of construction machinery (about 20 excavators and other equipment) 3) Environmental measures (soil and water preservation activities) 4) Support for the organization of agricultural institutions, training of	(1) Outputs (same as the revised target) 1) Basic agricultural infrastructure (a) Construction of new farm ponds (4,232 locations) (b) Expansion of existing farm ponds (649 locations) (c) Community ponds (29 locations) (d) Construction of farm roads (830km) (e) Construction of irrigation facilities (including micro-irrigation) (f) Making of 1/4000-scale maps 2) Procurement of construction machinery Construction machinery was not procured because there was a switch from having ALRO directly manage the work to having the work contracted out to another party.

(2) Project period	<p>personnel</p> <p>5) Low-interest loans for farmers</p> <p>6) Consulting services (Foreigners: 33 man-months/local consultants: 480 man-months)</p> <p>(2) Project period January 1999-June 2003 (54 months)</p>	<p>3) Environmental measures Farmers' consent to conduct soil erosion was not obtained. On the other hand, because tree planting was already their standard approach for soil conservation, planting was used instead under ALRO's budget.</p> <p>4) Support for the organization of agricultural institutions, training of personnel In addition to fostering village leaders, learning centers provided a venue for farmers to share their experiences and disseminate knowledge about organic fertilization.</p> <p>5) Low-interest loans for farmers While it is outside the scope of the yen loan for this project, financing within farmer groups is taking place in a way that they can obtain loans under the most favorable terms possible. Loans from ALRO's fund are being used for buying materials to expand integrated agriculture, financing livestock purchases, expanding ponds, and purchasing pumps for micro-irrigation</p> <p>6) Consulting services (Foreigners: 63 man-months; local consultants: 753 man-months (forecast))</p> <p>(2) Project period January 2002-October 2007 (est.) (70 months)</p>
Lessons Learned and Recommendations	<ul style="list-style-type: none"> · In small-scale, decentralized endeavors like this project, one should conduct enough discussions with the executing agency in accordance with local conditions regarding the flow of money from JBIC, the loan provider, to loan end users in the land reform areas, and to conduct timely and adequate discussions to determine administrative risk. · At the time of the project ex-post evaluation, it is difficult for a third party to conduct it alone if it does not get the assistance of the currently hired consultant. In addition, it would be desirable for the evaluation to be done in conjunction with the Thai side. There needs to be a prior discussion to review the content of this project with ALRO before the completion of this project (final loan disbursement) to determine what needs to be the focus of evaluation, what items to be evaluated, who is to evaluate, and how the evaluation is conducted. 	
Indicators set for use at time of ex-post evaluation	N/A	<p>(1) Operation indicators</p> <ol style="list-style-type: none"> 1) Number of farm ponds provided 2) Number of farm ponds expanded 3) Number of community ponds provided 4) Length of farm roads serviced (km) 5) Dam-based irrigation (rai) 6) Locations targeted for micro-irrigation <p>(2) Effect indicators</p> <ol style="list-style-type: none"> 1) Number of networks where village leaders are active 2) Number of community markets established 3) Farmer income (in the case if it becomes an ex-post evaluation item)

1. Operation Indicator

1) Farm Pond (Site)

	Original	Modified	Actual
Khon Kaen	2,550	2,549	2,476
Maha Sarakam	720	605	605
Sakhon Nakhon	5,250	788	730
Mukdahan	2,194	290	278
Total	10,714	4,232	4,089

2) Pond Enlargement (Site)

	Original	Modified	Actual
Khon Kaen	380	400	183
Maha Sarakam	110	184	148
Sakhon Nakhon	790	65	65
Mukdahan	327	-	-
Total	1,607	649	396

3) Community Pond (Site)

	Original	Modified	Actual
Khon Kaen	7	10	10
Maha Sarakam	1	1	1
Sakhon Nakhon	8	16	11
Mukdahan	4	2	1
Total	20	29	23

4) Main, lateral & On-Farm Road (Km)

	Original	Modified	Actual
Khon Kaen	241	333	333
Maha Sarakam	69	86	83
Sakhon Nakhon	111	236	236
Mukdahan	83	175	175
Total	504	830	828

5) Water Resources Development (rai)

	Original	Modified	Actual
Khon Kaen	8,100	3,926	3,905
Maha Sarakam	0	0	0
Sakhon Nakhon	0	0	0
Mukdahan	5,700	1,593	1,552
Total	13,800	5,519	5,457

6) Micro Irrigation (Plot)

	Original (additional)	Modified	Actual
Khon Kaen	1,685	819	722
Maha Sarakam	422	248	249
Sakhon Nakhon	861	223	245
Mukdahan	275	334	407
Total	3,243	1,624	1,623

2. Effect Indicator

1) Utilization of Farm Pond

Excellent : Scores 75 and above / Good : Scores between 61 and 74 / Fair : Scores between 41 and 60 / To be improved : Scores below 40.

Farm Pond (Site)

	Original	Modified	Utilization of Farm Pond			
			Excellent	Good	Fair	To be improved
Khon Kaen	2,550	2,549				
Maha Sarakam	720	605				
Sakhon Nakhon	5,250	788				
Mukdahan	2,194	290				
Total	10,714	4,232				

Pond Enlargement (Site)

	Original	Modified	Utilization of Enlarged Farm Pond			
			Excellent	Good	Fair	To be improved
Khon Kaen	380	400				
Maha Sarakam	110	184				
Sakhon Nakhon	790	65				
Mukdahan	327	-	-	-		-
Total	1,607	649				

2) Number of Leader Networks

	Total Number of Tambons under the Project	Number of Tambon Level Leader Networks (2006)	Target Number of Leader Networks still active (2010)
Khon Kaen	17(16)	16	16
Maha Sarakam	5	4	4
Sakhon Nakhon	9(8)	4	4
Mukdahan	4	4	4
Total	35(33)	28	28

3) Number of Community Market established

	Total Number of Tambons under the Project	Number of Community Markets (2006)	Target Number of Community Markets(2010)
Khon Kaen	17(16)	1	7
Maha Sarakam	5	2	3
Sakhon Nakhon	9(8)	3	5
Mukdahan	4	2	3
Total	35(33)	8	18

Note: There were basically no beneficiaries in the two tambons of Khon Kaen to Sakon Nakhon. Actual farmlands belonged to other tambons, and so this project did not conduct activities in those areas

