Summary of Terminal Evaluation

1. Outline of the Project			
Country: Lao People's Democratic		Project Title: Livelihood Improvement Project for Southern	
Republic		Mountainous and Plateau Areas (LIPS)	
Issue/Sector: Agriculture		Cooperation Scheme: Technical Cooperation Project	
Division in Charge: JICA Laos Office		Total Cost (At the time of evaluation) :392 Million Yen	
Period of	20 Nov. 2010 -	Partner Country's Implementing Organization:	
Cooperation	19 Nov. 2015	Department of Livestock and Fisheries (DLF), Ministry of Agri- culture and Forestry (MAF)	
		Supporting Organization in Japan and Related Cooperation: NA	

1-1 Background of the Project

The southern rural mountainous area situated in CLV Development Triangle Area in Lao PDR is still facing problems of insufficient supply of food and poverty. To tackle with these problems, improvement of agricultural, forestry, and livestock production system suited to the natural, and socio-economic conditions becomes an urgent agenda.

Because rural population cannot produce agricultural products by large-scale and intensive mono-cultural methods, they have made ends meet by small-scale production activities such as crop cultivation, livestock raising, aquaculture, wild plant gathering, and hunting. Especially, livestock and fish play important roles as food and income sources for small-scale households in the rural area. Therefore, enhancement of aquaculture-livestock adequate techniques can contribute to not only ensuring food security but also improving livelihood by selling surplus from the production system for rural people in the southern mountainous and plateau areas where small-scale farmers are predominant.

For the above reasons, Government of Lao PDR requested Government of Japan to implement the technical cooperation project with focus on livelihood improvement through extension of livestock and aquaculture techniques in the southern region of Lao PDR.

1-2 Project Overview

(1) Overall Goal

Villagers' livelihood is improved in 4 southern provinces through extension of appropriate technology.

(2) Project Purpose

Villagers' livelihood is improved in target clusters through extension of appropriate technology.

(3) Output

Output 1: Necessary support system is prepared for target cluster development.

- Output 2: Introduction and extension of appropriate technology are implemented in initial clusters.
- Output 3: Lessons and good practices in initial clusters are applied to other target clusters.
- Output 4: The results of the Project are recognized by relevant organizations (e.g. DLF, NAFES, PAFO/ DAFO in Southern provinces)

(4) Inputs (At the time of evaluation)

<Japanese side>

1) Experts

In total 6 long-term experts & 11 short-term Experts

Long term expert: Chief Advisor, Project Coordinator/Training & Extension Promotion, Agriculture Development

Short term expert: include 3 Third Country Experts (from Nepal, Thailand, and Vietnam)

2) Trainees received:14 officers (in Japan) and 7 officers (in Laos as well as in the third countries; Cambodia & Thailand

3) Equipment: a total amount of USD 1,475 thousand include provision of equipment: 37 items of equipment valued USD 235 thousand and renovation and construction of the Project facilities valued USD 14.5 thousand <Lao Side>

1) Counterparts: 27 officers (3 at national level, 24 at provincial and district levels in the target areas in Expansion stage, In Initial stage, 26 officers

2) Facilities and local costs

Offices for the Project have been secured by the Lao Government at DLF HQ in Vientiane and Champasak PAFO in Pakse. Utilities for the offices such as water and electricity have been provided by the Lao Government.

2. Evaluation Team

2. Evaluation (cam				
Member	 <japanese side=""></japanese> Ms. Saeda Makimoto, Team Leader, Senior Representative, JICA Laos Office Mr. Akira Matsumoto, Evaluation Analysis (LPPO/LPPA), President, A&M Consultant Ltd Mr. Takashi Seo, Agricultural Policy Advisor, MAF Mr. Shuhei Terada, Representative, JICA Laos Office 			
	Mr. Viengsavanh Sisombath, Evaluation Planning, Program Officer, JICA Laos Office <lao side=""></lao>			
	Total 5 evaluators joined from MAF and MPI. The Team leader was Dr. Khamphay			
	Thammavong, Deputy Director General of Department of Livestock and Fisheries (DLF),			
	MAF.			
Period of				
Evaluation	6 September – 25 September, 2015	Type of Evaluation: Terminal Evaluation		

3. Results of Evaluation

3-1 Accomplishment of the Project

3-1-1 Achievement of the Outputs

(1) Output 1:

Through the Project period, the technical training for counterparts (provincial and district staff) was organized totally 14 times which include 6 times of training on livestock, 3 times of training on aquaculture and 5 times of other related training. Study tour for was also organized in 3 times. 43 staff including PLFS, TSC, and DAFOs received training for initial and expansion clusters' activities.

Criteria to select core farmers were developed in both initial and expansion sites during the Project period. Gender balance was one of the criteria to select core farmers in the initial stage. The ratio of female core farmers was 24 %.

Finally, appropriate technologies were identified and listed up for each cluster. List of technologies being promoted under the Project

As stated above, the Project team has carried out all the activities according to the Original plan, as a result,

all the indicators set for the Output 1 in the PDM have been attained.

(2) Output 2:

Twenty seven (27) core farmers were selected in initial sites by 2012. However, some of them become nonactive in 2014, therefore, active core farmers were confirmed in 2015 and finally 17 core farmers (4 female, 13 male) were fixed. The core farmers adopted some appropriate technology to raise animal and/or produce fish/fingerling.

By July 2015, in total, 589 general farmers received farmer-to-farmer training from core farmers in initial sites. The Output 2 has been achieved from the viewpoint of indicators defined in the PDM.

(3) Output 3:

Seventy six (76) core farmers (10 female, 66 male) were re selected in expansion sites since 2013. The core farmer s adopted a certain appropriate technology to raise animal and/or produce fish/fingerling. The core farmers include 15 farmers for cattle, 16 for goat, 16 for pig, 17 for poultry, 5 for duck, and 7 for aquaculture. Farmer-to-farmer training was conducted totally 35 times in 31 target villages in 8 target Districts from August 2014 to March 2015. Totally 865 general farmers received the training.

Sixty point seven (60.7) % of the farmers adopt appropriate technology introduced by the Project.

Indicator 3-2 above were not reach the target level (more than 1,000), but the actual number of farmers who adopted appropriate technologies introduced by the Project was much more than expectation because of the higher ratio of adoption.

(4) Output 4:

End-line survey was conducted this year and the results were analyzed and summarized. The draft of survey report is prepared by the end of August 2015. The survey report will be finalized and submitted to Lao government.

Technical manuals for core farmers and for extension staff, and also technical DVD have been prepared and distributed.

Once the final seminar will be organized as scheduled, the Output 4 activities will be completed before the Project termination.

3-1-2 Achievement of the Project Purpose

Average annual income of 75 core farmers in expansion sites is increased by 106 %, and livestock holding value from selected activities is also increased by 84%. Also, average income of general farmers who received farmer-to-farmer training is increased by 85 %. Their asset including area of agricultural land, number of fish pond, vehicle, motorcycle, hand tractor and rice mill is also increased.

It is anticipated that the livelihood of the villagers who participated in the Project activities would be improved substantially by attaining two (2) indicators defined in the PDM as discussed above. In this sense, the Project Purpose shall be achieved at a satisfactory level by the end of the Project.

3-2 Summary of Evaluation Results of LPP Overall Program

(1) Relevance:

The relevance of the Project was regarded high when the Project was formulated, and continues to be <u>high</u> even at this terminal evaluation stage for the following reasons.

1) Relevance to the development policies of Government of Laos

The Lao Government has emphasized on rural development particularly in remote areas including mountainous and plateau areas, and has been making substantial efforts to raise livelihood of such rural communities

through securing food and generating income. The agriculture and livestock development are one of the important issues to achieve the targets.

The MAF has developed its own rural development programmes to contribute to the overall development in the relevant documents on "Agriculture Development Strategy and Vision". Additionally, recognizing malnutrition as a serious challenge in Lao PDR, "National Nutrition Strategy to 2025 and Plan of Action 2016-2020" is waiting for approval and "Production and promotion of small and healthy livestock" is stated as priority intervention.

The Project was formulated, has been implemented and is still relevant in the context of these national development policies and strategies.

2) Relevance to local needs

Fish production from natural rivers had remarkably declined in the recent years due to over-fishing and farmers wanted to increase aquaculture production. And also the demand of fish is very high in their market, and people are willing to purchase and eat fish than before because of better market access and afford to buy. On the other hand, natural grazing was dominant in the past to raise animal in rural areas in Southern provinces, but nowadays it is much more important to keep animals surrounded by a fence in the field and to put under control by caring in animal house at night in order to avoid animals' diseases and losses. Farmers also believe livestock is very essential for them as food and income sources as well as precious property / asset. Also they are highly interested to learn basic animal raising such as animal feeding method, vaccination and health care measurement.

3) ODA policies of the Government of Japan (GOJ)

"Country Assistance Policy for Lao PDR, prepared by Ministry of Foreign Affairs set the "Agricultural Development and Forest Conservations" as one of priority areas. "Country Assistance Implementation Plan for Lao PDR (2015)" prepared by JICA in line with the MOFA policy placed the LIPS Project in the "Program for Agricultural and Rural Development and Strengthening the Administration of Agriculture and Fisheries". The Project has been formulated in line with such ODA policies of GOJ.

4) Comparative advantage of technical cooperation by Japan

JICA has quite a long experience in implementing a number of technical cooperation projects in the agriculture and rural development sector in Lao PDR. "AQIP I & II"¹ Project (2001 - 2004 & 2005 - 2010), and "FORCOM"² Project (2004 - 2009) were particularly relevant to the current project. Approach, activities and lessons learnt in those projects have been utilized as a basis for this project. It was apparent for Japan to have comparative advantage in implementing the Project.

(2) Effectiveness:

Effectiveness of the Project was regarded as <u>relatively high</u> based on the following observations:

1) Prospect for achievement of the Project Purpose

The livelihood of the villagers who participated in the Project activities has been improved substantially by attaining two Indicators defined in the PDM as discussed above. In this sense, the Project Purpose shall be achieved at a satisfactory level by the end of the Project.

2) Effects of important assumptions and unexpected factors to the Project Purpose

There were observed as contributing and hindering factors for achieving the Project Outputs and the Project

¹ "AQIP I & II" = "Aquaculture Improvement and Extension Project Phase I & II"

² "FORCOM" = "Forest Management and Community Support" Project

Purpose.

< Hindering factors>

The following two factors have occurred with the extent to which the achievements of the Project have been affected. However, no other unexpected factors that affected the achievement of the Project Purpose have been observed by the time of this evaluation.

i) Flood damage in target villages

ii) Animal diseases in target villages

< Contributing factors>

The following factors were contributed to the achievement of the Project Outputs; 1) Devoted supports of the PAFO/ DAFO officers for core farmers and general farmers, and 2) Awareness of fingerling production of core farmers and their high interest in animal husbandry, and disease prevention and treatment.

(3) Efficiency:

Efficiency of the Project was regarded as moderate based on the following observations and analysis.

The inputs from the Japanese and Lao sides have been appropriate except the delay on the procurement for sub-activities, dispatch some more technical expertise to meet the field needs and amount of budget from Lao side. However, all inputs allocated have been fully utilized for project implementation. The Project is efficient in terms of input supply leading to good results.

(4) Impact:

The impact of this Project is moderate to relatively high as evidenced by the following factors.

1) Good practice / significant impacts / Spill-over effects

Derived from the hard works and good efforts of core farmers, it came up to profits, social contribution, escaping from poverty or record keeping.

The Project brings the direct impact to core farmers mentioned the above, but also it has brought the indirect spill-over effects. Through the Project intervention such as FTF training, demonstration effects of fencing land and fish pond by core farmers, and DAFO/PAFO/TSCs' technical advice, the interested farmers asked the questions and gradually applied the appropriate technology and skills. And the revolving system in villages has been created and begun to pass/transfer animal/fish to next new farmers successfully in some cases. 2) Other good influences

The Team summarized some other good influences through the Project intervention; i) Good mobilization / facilitation by PAFOs / DAFOs and ii) Good facilitation of core farmers / village head / village committee members.

(5) Sustainability:

Overall sustainability considered to be expected to be <u>moderate</u> based on the following observations and analysis.

1) Policy and institutional aspect

The Lao Government has emphasized the importance of food security and poverty reduction particularly in rural areas and has been making substantial efforts to raise livelihood of rural communities. National strategy and plan to develop livestock and fishery are very strong. In alignment with the above policy, national strategy and action plan to promote nutrition and community sanitation in Lao PDR are also emphasized according to the new strategy called "National Nutrition Strategy to 2025 and Plan of Action 2016-2020". As far as such

current and new policy and strategies are maintained, the sustainability of the Project achievement will be high.

2) Financial aspect

The GOL has continued to face difficulties in the national/provincial budget and the current financial capacity of the government organizations is not very strong. However, the Project has been supporting on "Farmer to Farmer Extension" approach after conducting FTF training. And also core farmers collaborated with related stakeholders and planned to transfer their animals and fish for other interested farmers according to the contract through "Revolving system". If such livestock and fishery revolving system will be continued, it is expected that the animal and fish production as well as disease control measures will be sustained.

On the other hand, regarding the government strategy and program on "3-build", some target villages were selected as "3-build" pilot villages. Such villages have supported also financial access to farmers. Therefore, farmers in such villages can utilize the opportunities.

3) Technical aspect

C/P staff at the provincial and district levels expressed a certain level of confidence and willingness to carry out project activities continuously in particular on extension services even after the Project has ended, using the knowledge, skills and experiences gained through the Project. Motivation and wills of C/P staff are strong through the accumulated experiences from the Project activities even though the level of understanding and application are differed by person to person. Therefore, the continuation of the Project activities by PAFO/ DAFOs in the target areas after the Project will sustain the technical assets.

3-3 Conclusions

Almost project activities have been completed and produced valuable achievements. The Project has successfully been implemented and will mostly achieve its outputs by the end of the Project period. Prospect of achieving the Project purpose is evaluated as high, thus, it is concluded that the Project will be terminated in November 2015 as stipulated in the R/D.

In terms of five criteria as stated, the Project has high relevance and relatively high effectiveness. The Project has achieved considerably positive results in the light of improvement of villagers' livelihood in the target areas through the capacity building and technical adoption. The Project was efficiently implemented in general. With these reasons, it is considered that the Project is managed by satisfactory level to achieve its purpose. Technical capacity has been gradually developed in the counterpart personnel and core farmers in the target areas, while there are still some issues that may need to be addressed, such as budget allocation for extension and monitoring, and further upgrading technical skills and knowledge of PAFO/DAFOs in order to meet the farmers' changing needs.

3-4 Recommendations

<To the Project Team>

(1) Extract lessons of the Project and reflecting to essential documents

Before the Project's termination, the Project should organize the final seminar to share the good practices of the successful core farmers and also the experiences gained through the Project implementation, and should discuss the following points in order to sustain the project activities after Project's completion;

(a) The success factors of core farmers;

(b) The criteria to select core farmers based on the result of the analysis above;

(c) The success factors of smooth transfer/handover animal/fish regarding to revolving system and also the

problematic factors of unsolved/disputing factors;

- (d) The critical points which should be included in the rule of the revolving system and check points before providing seedling of fish and livestock based on the result of the analysis; For example,
- (i) whether the farmers can afford to feed animals provided from Core farmers,
- (ii) how the core farmers provided seedling and livestock hand over to other farmers, and
- (iii) who take the responsibility to treat when the provided fish and livestock get a disease, and so on.
- (e) What DAFOs should report to PAFOs to monitor and sustain the Project activities, especially technical knowledge transfer and revolving system?

To hold the final seminar, the Project should analyze and prepare discussion materials in advance on the success factors and problems of selection of core farmers and revolving system.

(2) Future plan of revolving system

It is important for each district to have the future plan of revolving system. The future plan of Thateng district is a good example. The Project should make all districts bring their own plans to the final seminar which will held in November and ensure them to sustain the revolving system after the Project termination.

<To PAFOs and DAFOs>

(3) Continuation of monitoring activities

PAFO/DAFOs should recognize the importance and necessity of the monitoring after the Project implementation. Under the constraint of budget limitation, they should utilize various measures to visit/contact farmers once/ twice a year at least, for example integration of regular reporting activities, use of mobile phones etc.

(4) Reconsideration of repayment terms of revolving system

PAFO & DAFOs should discuss with core farmers, village heads and village committee members, and then finally determine the repayment terms of revolving system with consideration for the reproduction cycle of livestock animals and fishes.

<To MAF>

(5) Effective utilization of technical manuals

The various technical manuals for core farmers and extension staff were revised by the feedback from project's experiences. The Team recognizes those manuals are useful and practical. DLF of MAF should disseminate these technical manuals, and facilitate their utilization in any trainings and daily support activities by PAFO/ DAFOs in order to improve the livelihood in other districts/provinces.

(6) Enhancing expertise of PAFO/DAFO officers

Through the Project implementation, it is found out that enhancing the expertise of PAFO/DAFO officers on livestock raising including animal health is necessary in order to meet changing farmers' needs. MAF should address to develop core human resource by continuing professional education and to strengthen the practical technique application, in order to enhance PAFO/DAFO officers' knowledge of livestock raising.

(7) Periodical review after the Project

It is recommended that MAF hold a meeting to follow up the Project activities such as core farmers' activities and revolving system, and share the results in collaboration with JICA once a year.

3-5 Lessons learnt

(1) Selection of pilot villages

The pilot villages in the expansion stage seem to be too scattered compared with the resources of the Project including the number of Japanese experts. While it can be understood to select core farmers from the many different widespread villages to expand the project activities and to expect bigger impacts, the Project faced the difficulty of technical support and monitoring core farmers' activities due to wide-spread areas. In such a case, better utilization of local resources and/or third country experts should be considered.

(2) Criteria to select core farmers

Some stakeholders in the Project activities such as PAFO/DAFO officers and village committee members did not fully understand the basic concept of the Project and the criteria to select core farmers. Therefore, some core farmers do not have the sufficient experience to raise provided animals and others cannot afford to enough feed for animals. To select core farmers appropriately, the Project should have checked whether the selected core farmers meet the criteria set by the Project before providing the fish/animals.

In addition, the criteria of selecting core farmers should include not only having the basic skills of aquaculture and livestock raising and some degree of financial capacity, but also having a certain business sense and entrepreneurship.

(3) Training on basic business skills

The approach of this Project involves an aspect of micro credit system providing seeds of revolving system to core farmers. Therefore, the Project ought to have provided trainings on business skills including records of production to sales and forecasting the risk of the business plan.

(4) Monitoring method

The Project covered the cost of PAFO/DAFO officers to visit farmers regularly, therefore the Project should have set the necessary monitoring items, made the monitoring form, and agreed with PAFO/DAFOs to report on the progress of core farmers' activities. In addition, it should have provided training for effective field monitoring if necessary.