Country Name

	conducted by	Laos Office:	June, 2020
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Lao People's Demo Republic	Livelihood Improvement Project for Southern Mountainous and Plateau Areas			
I. Project Outline				
Background	The border mountainous area, including four provinces of Attapeu, Champasak, Salawan and Sekong, is a part of the Cambodia-Laos-Vietnam (CLV) Development Triangle Area. In 2008, 352 out of the total 1,664 villages in the four provinces were designated as "poor village" by the Government of Lao PDR, and the promotion of farmers' production and the improvement of their livelihoods were urgent issues. On the other hand, the Government of Lao PDR had taken "the Lao Extension Approach" based on clusters ¹ of villages for outreaching administrative services more across the country. However, the approach had not been properly practiced at a field level, and there was room to improve the approach based on lessons learnt from the failures.			
Objectives of the Project	Through trainings on appropriate technologies identified and cluster¹ development for officials of the Provincial Agriculture and Forestry Offices (PAFOs), the District Agriculture and Forestry Offices (DAFOs) and the Technical Service Centers (TSCs), fostering of core farmers to introduce and disseminate the technologies, and implementation of farmer-to-farmer trainings from the core farmers to general farmers, the project aimed at improving villagers' livelihood in the target clusters, thereby contributing to improvement of villagers' livelihood in the four southern provinces. 1. Overall Goal: Villagers' livelihood is improved in the 4 southern provinces through extension of appropriate technology. 2. Project Purpose: Villagers' livelihood is improved in the target clusters through extension of appropriate technology.			
Activities of the Project	 Project Site: Provinces of Attapeu, Champasak, Salawan and Sekong Main Activities: 1) Identification of appropriate technologies based on local conditions, 2) Trainings on the appropriate technologies and cluster development for officials of PAFOs, DAFOs and TSCs, 3) Technical transfer to the core farmers for dissemination of the identified appropriate technologies, 4) Implementation of farmer-to-farmer training, and so on. Inputs (to carry out above activities) Japanese Side Lao Side Experts: 14 persons 1. Staff allocated: 53 persons Experts from the Third country: 3 persons (Nepal, 2. Land and facilities: project offices in the Thailand and Vietnam) Department of Livestock and Fishery and PAFO of Champasak province Trainees received in Japan: 14 persons Champasak province Trainees received in Third Country: 7 persons 3. Local expenses: utility costs (Cambodia and Thailand) Equipment: 4WD vehicles, projector and screen, motorcycles, notebook computer, etc. 			

II. Result of the Evaluation

None

<Constraints on Evaluation>

Cooperation Agency

• As Attapeu province did not provide any information and data about the project, the evaluation analyses in this ex-post evaluation is carried out on the basis of the information and data collected from the three provinces of Champasak, Salawan, and Sekong.

Project Cost

Department of Livestock and Fishery (DLF), Ministry of Agriculture and Forestry (MAF)

(ex-ante)

390 million yen, (actual)

371 million yen

1 Relevance

Project Period

Implementing

Agency

in Japan

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

Local expenses: cost for project activities

November 2010 – November 2015

The project was consistent with Laos' development policies of the "National Growth and Poverty Eradication Strategy" (2004) setting an agriculture and forestry as one of the four central sectors and "The 6th five-year plan for the agriculture and forestry sectors" (2006-2010) focusing on food security as one of the four prioritized goals at the time of ex-ante evaluation as well as the "Strategy of Livestock and Fishery Development in Lao PDR 2020" emphasizing the development of livestock and fishery at the time of project completion.

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

The project was consistent with Laos' development needs to outreach administrative services through the clusters of villages across the four provinces of Attapeu, Champasak, Salawan and Sekong for the promotion of farmer's production and the improvement of their livelihoods.

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

The project was consistent with "The Country Assistance Policy for Lao PDR" (2006) highlighting "Agricultural Regional

¹ Cluster is a unit for administrative services and composed of 5-10 villages under a district which is the lowest administrative division.

Development and Utilization of Sustainable Forest Resource" as one of the priority areas.

<Evaluation Result>

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

2 Effectiveness/Impact

<Status of Achievement of the Project Purpose at the time of Project Completion>

The Project Purpose was achieved by the time of project completion. Through the project, core farmers were trained and started to introduce appropriate technologies into their farmlands. As a result, the average income of almost of all the core farmers in the expansion sites (the sites targeted in the latter half of the project) increased by 106% from 20.9 million kips in 2013 to 43 million kips in 2015 (Indicator 1). Also, the average income of the general farmers who received farmer-to-farmer trainings on aquaculture provided by the core farmers increased by 85% from 18.8 million kips in 2014 to 34.8 million kips in 2015, and their assets also did (Indicator 2).

<Continuation Status of Project Effects at the time of Ex-post Evaluation>

The project effects have been partially continued since the project completion. Even after the project completion, the core farmers trained by the project have continuously adopted the appropriate technologies introduced by the project. According to PAFOs and DAFOs in the target three provinces, due to the continuous use of the technologies, the average income of the core farmers in the three provinces have sustained or increased in comparison to the one at the time of project completion. However, they also reported that there were some years when the average income decreased for the reasons such as flood and animal disease. Additionally, in July 2019, general farmers, who received technical instructions from the core farmers (Champasak province: 70 general farmers, Salawan province: 7 general farmers), started to introduce the appropriate technologies, and although in-depth data on their average income and assets was available only for Champasak province (one village), according to the interviews to the general farmers in the target three provinces, their income and assets have gradually risen year by year.

The extension activities based on the farmer-to-farmer approach have been partially sustained. Since the project completion, some of the core farmers trained by the project have disseminated the appropriate technologies introduced by the project to their relatives and surrounding farmers, and a number of new core farmers was raised in Champasak province and Sekong province by July 2019 (Champasak province: 32 new core farmers, Salawan province: no new core farmer, Sekon province: 8 new core farmers). Also, in addition to the core farmers trained by the project, it was confirmed that the new core farmers have also provided trainings (On-the-Job training basis) to general farmers in the target areas. The total number of participants in farmer-to-farmer training held between 2016 and July 2019 was 430 farmers in Champasak province, 135 farmers in Salawan province, and 260 farmers in Sekon province. DAFOs in all the target provinces reported that the main reasons for the continuous dissemination of the appropriate technologies are because the technologies are easily adopted, and the adoption leads to an increase in the income. Yet, due to personnel and budget constraints of government organizations, the dissemination areas are limited to areas surrounding the areas where the core farmers trained by the project live.

<Status of Achievement for Overall Goal at the time of Ex-post Evaluation>

The Overall Goal has not been achieved at the time of ex-post evaluation. Comparing the production of seven agricultural products in the target three provinces in 2015 to in 2018 (or 2017), the number of agricultural products whose production increased was 2 in Champasak province, 6 in Salawan province, and 1 Sekon province (Indicator 1). Rice, fish and meat consumption of farmers and their income have been in an upward trend in all the target three provinces (Indicator 2 and 3). According to PAFOs and the core farmers in all the target provinces, the appropriate technologies introduced by the project has contributed to such positive impacts. However, as mentioned above, areas where the appropriate technologies have been disseminated have been really limited, and even the project effects pertinent to the Overall Goal have covered only areas confirmed through the visit to districts and the interviews to farmers at the time of ex-post evaluation. In light of the above, the project effects confirmed above are considered not to be achieved up to the level set by the Overall Goal (the whole areas of provinces).

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

A positive impact was observed at the time of ex-post evaluation. Due to the usefulness of LIPS Implementation Guideline for Expansion Stage developed by the project, World Vision International, an international non-governmental organization, invited DAFO staff to train their targeted farmers about how to select the best core farmers by using the guideline. On the other hand, a case causing an adverse impact was confirmed by the field survey in this ex-post evaluation. One of the farmers adopting the appropriate technology introduced by the project (pig farming) in Mulapamok district of Champasak province expanded its scale to a commercial farm, which caused serious odor pollution and noise. The problem was solved by the relocation of the pig farm.

<Evaluation Result>

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

Achievement of Project Purpose and Overall Goal

Aim	Indicators	Results
(Project Purpose)	1. Core farmers' income is increased by	Status of the Achievement: Achieved (Partially Continued)
Villagers' livelihood is	20% on average as a result of appropriate	(Project Completion)
improved in the target	technology introduced by the project.	• The average income of 75 out of 76 core farmers fostered by the project in
clusters through extension		the expansion site increased by 106% from 20.9 million kip in 2013 to 43
of appropriate technology.		million kip in 2015.
		• The remaining one core farmer was just selected and started to adopt the
		appropriate technology introduced by the project.
		(Ex-post Evaluation)
		• The number of core famers using the appropriate technologies in July 2019
		has increased mainly because of their relatives and surrounding farmers
		(Champasak province: 48 core farmers, Salawan province: 23 core farmers,
		Sekon province: 28 core farmers).
		• According to PAFOs and DAFOs in the three provinces, although the
		average income of the core famers has sustained and increased, there were

attended general farmers who farmer-to-farmer training is increased.

some years when the income decreased due to flood and animal disease.

2. Average income and assets of those Status of the Achievement: Partially Achieved (Partially Continued) (Project Completion)

- The average income of the general farmers who received farmer-to-farmer trainings on aquaculture increased by 85% from 18.8 million kip in 2014 to 34.8 million kip in 2015.
- Their assets also rose between 2014 and 2015 as indicated in the table below.

[Assets of the general farmers]

Asset / Year	2014	2015
Area of paddy fields (ha/household)	1.3	1.4
Area of other agricultural fields (ha/household)	1.8	2.2
Number of fish pond (per household)	1.4	1.6
Number of vehicle (per household)	0.2	0.2
Number of motorcycle (per household)	1.6	1.7
Number of hand tractor (per household)	0.6	0.7
Number of rice mill (per household)	0	0.1

(Ex-post Evaluation)

- · According to the interviews to the core farmers, the average income and assets of general farmers in the three provinces have been in an upward
- The data on the average income and assets of general farmers in Champasak province (one village) is illustrated as below. The data on the one in the remaining two provinces was not available.

[The average income and assets of general farmers in the Champassak

province (one village)]

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Item / Year	2015	2016	2017	2018	
Income from agricultural production (million Kip/person/year)	8.5	9.5	10	11	
No. of households with livestock					
Buffalo	24	25	25	25	
Cattle	34	34	37	37	
Goat	-	10	20	40	
Pig	23	25	26	26	
Chicken	40	40	42	47	
Area of agricultural fields (ha/household)	1.5	1.5	2	2	
No. of households with fishponds	3	5	6	10	
No. of households with vehicle	1	1	2	3	
No. of households with motorcycle	48	62	66	75	
No. of households with hand tractor	41	56	58	61	
No. of households with rice mills	14	15	17	18	

(Overall Goal) Villagers' livelihood is improved in the 4 southern provinces through extension of appropriate technology.

1. Agricultural production of villagers is (Ex-post Evaluation) Not Achieved increased in 4 southern provinces.

Comparing the production of seven agricultural products in the target three provinces in 2015 to in 2018 (or 2017), the number of agricultural products whose production increased was 2 in Champasak province, 6 in Salawan province, and 1 Sekon province.

[Agricultural production of villagers in Champasak province]

Item / Year	2015	2016	2017	2018
Rice (kg/person)	750	850	950	1,050
Buffalo (head/household)	3	4	4	3
Cattle (head/household)	5	4	5	5
Pig (head/household)	4	5	7	7
Goat (head/household)	0	0	0	0
Poultry (head/household)	47	34	49	26
Aquaculture (pond/household)	2	2	2	2

Note: the data from two core farmers and two general farmers in each province.

[Agricultural production of villagers in Salawan province]

Item / Year	2015	2016	2017	2018
Rice (kg/person)	1,034	1,059	982	853
Buffalo (head/household)	1	1.2	1.4	2
Cattle (head/household)	1	1.3	1.6	2

Pig (head/household)	7	8	12	12
Goat (head/household)	0.2	0.3	0.6	0.6
Poultry (head/household)	25	28	29	30
Aquaculture (pond/household)	1.8	2.4	3.6	4

Note: the data from two core farmers and two general farmers in each province.

[Agricultural production of villagers in Sekong province]

Item / Year	2015	2016	2017	2018
Rice (kg/person)	384	394	369	379
Buffalo (head/household)	0.25	0.25	0.27	1
Cattle (head/household)	0.24	0.24	0.24	ı
Pig (head/household)	0.25	0.26	0.24	ı
Goat (head/household)	1.41	1.36	1.28	ı
Poultry (head/household)	11.8	12.2	11.8	1
Aquaculture (pond/household)	-	-	-	-

Note: the data from two core farmers and two general farmers in each province

2. Rice, fish, and meat consumption of (Ex-post Evaluation) Not Achieved villagers is increased in 4 southern provinces.

The consumption by villagers in three southern provinces (only the target district) has gradually increased since the project completion. However, as the confirmed coverage of the project effect has been quite limited, it could be considered that the level required for the Overall Goal (the spread of the effect across the provinces) has not been reached.

[Rice, fish, and meat consumption of villagers in Champasak province (Unit:

g/person/week)]

Item / Year	2015	2016	2017	2018
Rice	3,000	3,113	3,150	3,225
Fish	815	843	857	889
Meat	409	421	440	448

Note: the data from the target district.

[Rice, fish, and meat consumption of villagers in Salawan province (Unit:

g/person/week)]

Item / Year	2015	2016	2017	2018
Rice	3,151	3,189	3,218	3,313
Fish	266	267	266	269
Meat	450	450	500	500

Note: the data from the target district.

[Rice, fish, and meat consumption of villagers in Sekong province (Unit:

g/person/week)]

Item / Year	2015	2016	2017	2018
Rice	3,038	3,031	3,081	3,186
Fish	300	308	323	312
Meat	439	467	468	468

Note: the data from the target district

3. Average income of villagers is increased (Ex-post Evaluation) Not Achieved in 4 southern provinces.

The average income of the core farmers and general farmers interviewed by the ex-post evaluation has been in an upward trend since the project completion. However, as the confirmed coverage of the project effect has been quite limited, it could be considered that the level required for the Overall Goal (the spread of the effect across the provinces) has not been reached.

[Average income from agricultural activities (Unit: 1,000 Kip/household)]

Province / Year	2015	2016	2017	2018
Champasak	225.4	196.7	230	236.3
Salawan	112.3	124.3	170.4	179
Sekong	93.8	101.3	120.4	128.2
Note: the data from two core farmers and two general farmers per province)				

Note: the data from two core farmers and two general farmers per province

Source: Terminal Evaluation Report, Interview and questionnaire with PAFOs, DAFOs and 12 core farmers (two core farmers and two general farmers per province)

3 Efficiency

The project cost and period were within the plan (ratio against the plan: 95% and 100%, respectively). The outputs were produced as planned. Therefore, the efficiency of the project is high.

4 Sustainability

<Policy Aspect>

The "8th Five-Year Agriculture and Forestry Development Plan" (2016-2020) promotes the development and production of livestock and aquaculture. As the project aimed at introducing and disseminating the appropriate technologies such as livestock and aquaculture across the four southern provinces, the project has been backed up by the national policies.

<Institutional Aspect>

There have not been any major changes in the organizational setting for the dissemination of the appropriate technologies introduced by the project.

[National level]

DLF of MAF has been responsible for establishing national strategies and plants to regulate or disseminate livestock and aquaculture in addition to the supervision and support to officers of provincial and district offices to outreach the extension service of the appropriate technologies to farmers. 60 staff members have been allocated there, and according to DLF, the number of the staff has been sufficient as they have fulfilled their responsibilities without any major problems.

[Provincial level]

PAFO has played a role in implementing the strategies and plans established by DFL and guiding DAFO for the extension services of the appropriate technologies. 10 staff members have been allocated there, and according to PAFO in all the target provinces, the number of the staff has been enough as they have performed their roles without any major problems.

[District level]

DAFO has been in charge of providing the extension services of the appropriate technologies to farmers. An office in each district has 25 staff members. According to DAFOs visited for this ex-post evaluation, there have been a lack of the staff, depending on offices, due to a quota system. Therefore, they have undertaken the extension activities within their limitation of human resources, and a recruitment of new staff is under consideration.

TSC has taken a responsibility for transferring the technical knowledge and skill to adopt the appropriate technologies to farmers. According to MAF, TSC has been placed within DAFO and fulfilled the responsibility without any major problems.

[Village level]

The revolving system introduced by the project has been sustained even after the project. Committees for the revolving system have strongly functioned, and a series of cycles that core famers hand over livestock to other farmers has been implemented without any major problems.

<Technical Aspect>

[National, provincial, and district levels]

The staff members of DLF and PAFOs and DAFOs in the three target provinces of Champasak, Salawan and Sekong have sustained the necessary knowledge and skills for the dissemination of the appropriate technologies. This is because MAF organizes refresher trainings on agriculture and livestock twice a year, and 30-50 technical staff members from the organizations participate in the trainings.

The staff members of TSC have also sustained the necessary knowledge and skills for the dissemination of the appropriate technologies. International non-governmental organization and other donors like the World Bank and International Fund for Agricultural Development provide refresher trainings to the members and core farmers about agriculture, livestock, aquaculture and fishery.

[Guideline and manual]

As mentioned above, LIPS Implementation Guideline for Expansion Stage developed by the project has continued to be utilized by DAFO. For example, an international non-governmental organization invited DAFO staff to train their targeted farmers about how to select the best core farmers by using the guideline.

Furthermore, all of the manuals for extension staff and core farmers developed by the project, such as manual on indigenous cattle raising, manual on goat raising, and manual on indigenous pig raising, have bee continuously utilized. According to staff of DAFOs in the target provinces, the reason for the use is because the appropriate technologies introduced by the project take into account of local context and this leads to farmers' income generation.

<Financial Aspect>

[National level]

The budget for the dissemination of the appropriate technologies introduced by the project has been continuously allocated to DLF since the project completion. According to DLF, the budget has been sufficient to perform the role given. However, the overall budget of DLF has been reduced since the project completion due to more budget allocation to other governmental agencies to take measures against natural disasters. Although the trend is expected to continue, the minimal amount of budget for the implementation of livestock and aquaculture activities will be continuously allocated.

Budget for Dissemination Activities (Unit: Million Kip)

Organization/ 2019 2016 2018 2017 Place (plan) DLF 800,000 770,000 530,000 229,000 Champasak 200 200 200 200 200 200 180 260 Salawan

90

105

110

Note: The budget of DLF is the total budget for capacity enhancement of its staff.

80

[Provincial level]

The budget for the dissemination of the appropriate technologies has continued to be allocated to PAFOs since the project completion. However, the allocation has been smaller than the requirements due to the limitation of budget, which has constrained the implementation of the dissemination activities, but the minimal amount of budget for the extension activities will be continuously secured.

Sekong

<Evaluation Result>

In light of the above, slight problems have been observed in terms of the institutional and financial aspects of the implementing agency. Therefore, the sustainability of effects of the project is fair.

5 Summary of the Evaluation

The project achieved the Project Purpose aiming at the improvement of villagers' livelihood in the target clusters through extension of appropriate technology. As the core farmers trained by the project has continued to use the appropriate technologies introduced by the project and disseminated them to their relatives and surrounding farmers, there are some villages whose income has increased. However, the dissemination of the technologies has been limited, and the Overall Goal which aimed at improving villagers' livelihood in the 4 southern provinces has not been achieved. As for sustainability, the number of personnel at a district level has been lacked, the overall budget of DLF has been in a downward trend, and the budget for the extension activity at a field level has been limited. However, it was also confirmed that the sufficient number of staff has been allocated to many organizations and the minimum budgets for the activities which each organization is obliged to undertake have been secured.

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

III. Recommendations & Lessons Learned

Recommendations for Implementing Agency:

- In order to enhance the sustainability of the project, the following recommendations are proposed.
 - 1) PAFOs and DAFOs secure their budget for their extension activities by requesting additional budgets to the central government.
 - 2) PAFOs, DAFOs, and TSCs set an annual goal for the extension activities within the allocated budget and implement the activities along with the goal.

Lessons Learned for JICA:

- The technologies introduced by the project are appropriate to local contexts and farmers' needs, and the average income of farmers introducing the technologies has increased. In light of this, where projects introducing any technologies into locals are formulated and/or planned, in order to maximize their effects, it would be better to carefully study local contexts and consider how to apply them to the projects at the stage of project formulation and/or planning.
- Since the project completion, the technologies introduced by the project have been disseminated from target farmers to non-target farmers and areas, but its coverage has been limited due to personnel and budget constraints of government organizations at this moment. In order to sustain and expand the project effects, it is necessary to prepare an action plan by discussing with counterparts and farmers how to disseminate the technologies to other farmers and areas through farmer-to-farmer trainings after training core farmers. Therefore, at the stage of project implementation, it would be better to undertake the extension activities and discuss actions to continue the activities after the project completion through discussion and agreement with counterparts.



Core Farmer Raising Poultry in Thateng district, Sekong province



Pig Raising in Mulapamok district, Champasack province