Summary of the Terminal Evaluation

1. Outline of Project					
Country: Lao PDR		Project Title: Clean Agriculture Development Project			
Issue/Sector: Agricultural and Rural Development		Type of Assistance: Technical Cooperation Project			
Department in charge: Team 1, Agricultural and Rural Development Group 1, Economic Development Department		Total Cost: 333 million yen			
Cooperation Period	November 10, 2017 – November 9, 2022 (5 years) (R/D signed: May 23, 2017)	Partner Country's Implementing Organizations: Department of Agriculture (DOA), Ministry of Agriculture and Forestry (MAF)			

1-1 Background of the Project and the Outline of the Evaluation

In Lao People's Democratic Republic (Hereinafter referred to as "Lao PDR"), more than 70% of the working population is engaged in agriculture. Agriculture is an important industry that supports employment in rural areas. In recent years, the Lao government has been promoting the production of clean agriculture (CA) products in order to enhance food safety. It has been reinforcing measures to take advantage of the strength of Lao agriculture, which uses fewer inputs of pesticides and chemical fertilizers compared to neighboring countries.

However, there is still a limited number of producers who are capable of ensuring the quality that meets the market needs and of producing stable amount to reassure the confidence of consumers. In addition, little progress has been made in terms of developing markets and expanding sales channels to allow the producers to sell CA products.

As such, the "Clean Agriculture Development Project" (CADP, hereinafter referred to as the "this Project") was launched in November 2017. Of 17 provinces of Lao PDR, four provinces (Vientiane Capital, Luang Phabang, Xayaboury and Xieng Khouang) were selected as pilot provinces. The Project has provided support to improve techniques on production and quality management of CA products. In parallel, assistance concerning technical guidance and reinforcement of mechanisms has been provided with a view to allowing the staff from the Ministry of Agriculture and Forestry (MAF) at the central, provincial and district levels. Furthermore, support has been provided to enhance broad awareness of intermediaries, buyers and consumers on the value of CA products, and to stimulate demands.

In view of the completion of this Project in November 2022, the terminal evaluation conducted this time aims to assess and review the results and outcomes of the project activities, and to identify recommendations for the remaining period and follow-up of the Project as well as the lessons learned for the implementation of similar projects going forward.

1-2 Project Overview

(1) Overall Goal

Clean Agriculture (CA) in Pilot Provinces is promoted through the increase of production and supply.

(2) Objective of the Project Supply of CA products based on market needs is promoted in Pilot Provinces.

(3) Outputs

Output 1: Farmers/farmers groups in Pilot Provinces are strengthened for production of OA products corresponding to market needs.

Output 2: Sales of CA products in Pilot Provinces is promoted.

(4) Inputs

Japanese side: Total cost 333 million yen

Long-term experts: 6 persons Machinery and equipment

Short-term experts: 5 persons Local cost: US Dollars (USD) 702,473

Lao side:

Assignment of Counterparts (C/Ps): 28 persons

Provision of offices and facilities: The Lao side provided one project office on the 1st floor of a building in the compound of MAF (including utility costs). It also accommodated a series of training courses in the provincial and district office buildings.

Local Cost: n/a

2. Outline of the Mission

Members of	Japanese side		
the Mission		- -	
	Name	Designation	Position and organization
		ļ	
			Director, Team 1, Agricultural and Rural
	Mr. Keio MISOE	Leader	Development Group 1, Economic
			Development Department, JICA
		<u> </u>	

	Ms. MASUMI Emi		Program Officer, Team 1, Agricultural and Rural Development Group 1, Economic Development Department, JICA
	Ms. FUJIOKA Rika	Evaluation Analysis	Senior Consultant, Social Development Group, Koei Research & Consulting Inc.
Period of Evaluation	From August 22 to	September 9, 202	Type of Evaluation: Terminal Evaluation

3.Summary of Results

3-1 Progress of the Project

(1) Achievement of Results

Output 1: Farmers/farmers groups in Pilot Provinces are strengthened for production of OA products corresponding to market needs.

Level of achievement: While the degree of the achievement varies among the four pilot provinces, overall achievement is relatively high.

A total of 24 volumes of organic agriculture (OA) technical manuals in the video format were created featuring the techniques introduced by the Project, and uploaded on the YouTube channels of the Project and other organizations concerned. Further dissemination of these technical manuals is planned. The techniques on such subjects as compost making and soil management introduced by the Project, have been applied by farmers in their farms on a regular basis (Indicator 1)). Production planning has been undertaken particularly by individual farmers, making use of the techniques that they learned through the Project. In this regard, the "Greenhouse Support Program" facilitated farmers to produce and sell products according to market needs throughout the year. There are cases where the target as well as nontarget farmers built greenhouses by themselves, in addition to the greenhouses built through the support by the Project. The training on OA standard under the Project was useful in enhancing basic understanding on the Lao OA standards and Internal Control System (ICS). Combined with the proactive engagement of the OA committees, farmer groups and farmers, this support by the Project contributed to the overall improvement on ICS (Indicator 2)).

Output 2: Sales of CA products in Pilot Provinces is promoted.

Level of achievement: In view of the varied degrees of achievements among the pilot provinces, and the limited degree of achievements mainly on the indicator 2), the Output 2 is achieved to certain degree.

With the aim to enhance understanding and awareness of stakeholders as well as general consumers on CA and its products, a total of 21campaigns/events have been organized. These included sales of OA products at the booth that were set up, display of posters, distribution of leaflets, tasting of juice, video screening, and a business forum (Indicator 1)). A total of 25 business matching activities have been implemented, with a view to enhancing business opportunities for farmers/farmer groups. These activities included setting up events, seminars and forum, collection, analysis and provision of relevant information, as well as pre-contacts and discussions with potential business entities and facilitation of meetings between these entities and farmers/farmer groups. Out of these 25 activities, two business transactions are on-going, one is on a trial and three are under negotiation (Indicator 2)). OA markets have been opened in Vientiane Capital, Luang Phabang and Xieng Khouang. Available reference data show that the average increase ratio of the sales volume at these OA markets among the pilot provinces (except Xayaboury) is 183% (Indicator 3)). In addition, available reference data also indicate a general increase in the number of sales channels other than OA markets, both for individual farmers and farmer groups (Indicator 4)).

(2) Prospect for achieving Project Purpose

<u>Project purpose: Supply of CA products based on market needs is promoted in Pilot</u>

Provinces)

Level of achievement: while there are differences among the four pilot provinces and specific data on the sales volume as per the Indicator 2) are not available, in view of the available reference data, the Project Purpose is deemed mostly achieved.

With regard to the number of members of OA farmer groups, there has in general been an upward trend. The increase ratio from 2017 to 2022 (as of August), of the number of members of OA farmer groups from all the four pilot provinces combined, is 100%. This exceeds the set target figure of 100%. Meanwhile, the figures vary among the pilot provinces: 123% for Xieng Khouang, 73% for Vientiane Capital, and 30% for Luang Phabang (comparable data not available for Xayaboury) (Indicator 1)). The average figure of 100% exceeds the target figure of 75%. The large differences may be attributed, inter alia, to consumers' preference and awareness and market conditions. In addition, the impact of COVID-19 seems to be severe for Luang Phabang where tourism is a particularly important industry (Indicator 1)). Based on the available actual figures, the increase ratio of the production volume combined of the pilot provinces is 174% (from 2017 to 2021), which exceeds the set target of 120%. There are nevertheless large differences among the pilot provinces: 212% for Vientiane Capital, 25% for Xieng Khouang and 12% for Luang Phabang (comparable data unavailable for Xayaboury). While specific figures of sales volume for all the pilot provinces are not available, its

upward trend is indicated as per the indicators 3) and 4) of the Output 2. The increase ratio of 183% for OA markets based on the available data exceeds the target ratio of 120%. In addition, the apparent close linkage of the sales volume with the production volume also suggests an increasing trend of the production volume in general (Indicator 2)). It should be noted for both of the indicators that the production and sales volumes have apparently been affected by COVID-19 and associated restrictions, as well as recent deterioration of economic situations and resultant change of consumer behaviours. Hence, certain level of decline has been reported. However, when considering the trend over the past five years, both the production and sales volumes seem to be showing an upward trend.

(3) Prospect for achieving Overall Goal

Overall Goal: Clean Agriculture (CA) in Pilot Provinces is promoted through the increase of production and supply

Level of achievement: At the time of this terminal evaluation, the Overall Goal is considered mostly achieved. There are nevertheless large differences among the pilot provinces on the degree of achievement, and the comprehensive data specifically for the production volume, as per the indicator 2), are unavailable.

For the Indicators 1) and 2): similar observations as the Project Purpose can be presented: i.e., while the overall achievement is favorable and exceeds the target figures under the Indicator 1) (150% increase for farmer group members) and 2) (100% increase for production and sales volumes), there are large differences among the pilot provinces. The figures described under the Project Purpose above also exceed the figures set for the indicators of the Overall Goal. For the Indicator 1), concerning the number of farmer group members, the figure indicative of the actual outcome of the Project is 100%, which is equivalent to the target figure of 100%. For the Indicator 2), based on the available data, the figures indicative of the actual outcome of the Project are 174% for production and 183% for sales, while the figure set as the target for the increase in production and sales is 100%. Nevertheless, there is a large difference in the actual results among the pilot provinces.

3-2 Summary of Evaluation Results

(1) Relevance

Relevance of the Project is high.

The Project is in line with the development policies of the Lao government. The identification of the target farmers and groups in the target provinces, various factors were taken into account to ensure that support would be directed to the appropriate groups and provinces. These factors included experiences of farmer/farmer group practicing OA, production and market situations, and the interest and involvement of

stakeholders. The support under the Project has been provided with due consideration for the situations concerning clean agriculture in Lao PDR. It is also considered timely that the Project aims to strengthen quality management from both production and marketing aspects, in accordance with ICS and OA standards and based on a market-driven approach.

(2) Consistency

Consistency of the Project is relatively high.

The Project is consistent with the development assistance policies of the Japanese Government. It is a part of the cooperation concerning the development of food value chains in Southeast Asia under JICA. While difficulties were encountered when exploring tangible form of collaboration between the Project and other projects by other development organizations due mainly to COVID-19, the complementarity of the Project with various projects by JICA and other development organizations is observed. The assistance provided under the Project addresses a global concern to promote clean agriculture.

(3) Effectiveness

Effectiveness of the Project is varied among the pilot provinces.

Overall, the Project Purpose is deemed mostly achieved, in terms of the increase in the number of farmer group members, production volume and sales volume. Meanwhile, the levels of achievement among the four pilot provinces largely vary. The two outputs of the Project are considered to duly contribute to the achievement of the Project Purpose, as the market-conscious production and sales of organic products is expected to duly contribute to the promotion of supply of CA products based on market needs. The influence of the two external factors on the Project Purpose is deemed relatively low.

(4) Impact

The impact of the Project is relatively high.

The Overall Goal of the Project is deemed mostly achieved at the time of this terminal evaluation. The long-term effects of the Project include the reinforcement of the awareness among the stakeholders on the importance of food safety, dissemination of techniques and knowledge of OA acquired through the Project not only among the target farmers but also from these farmers to non-target farmers, as well as the increase of agricultural income. There are nevertheless rather unpredictable factors as the market demands and consumers' interest and preference for OA products, which may affect the degree of long-term effects among the pilot provinces.

(5) Efficiency

Efficiency of the Project is medium.

The implementation of the Project activities has been largely affected by the outbreak and spread of COVID-19 as well as the associated restrictions, resulting in delays in the dispatch of experts, and postponement and cancellation of a number of

activities. While the alternative methods of the implementation were explored, such as the utilization of on-line formats for training and dissemination of OA technical manuals, the modification of the inputs and timing of the activities was required.

(6) Sustainability

The sustainability of the Project is medium to relatively high.

In terms of policy/political aspect, clean agriculture is identified as an important subject, as stipulated in the main development policy documents. On institutional/organizational and financial aspects, ensuring the technical transfer to farmers/farmer groups at the provincial and district levels, with the technical backstopping from the central level, would be essential. Enhancement of coordination with organizations in charge of aspects other than agricultural production is deemed instrumental when for instance undertaking activities aimed at marketing promotion. Facilitation of OA certification application and approval process is also important to further ensure sustainability. Concerning technical aspect, the knowledge and techniques introduced by the Project seems likely to be continuously applied by the stakeholders concerned and will possibly be transferred to those who are not the direct target of the Project. With regard to the socioenvironmental aspect, the interest in clean agriculture products is expected to be maintained or elevated going forward.

3-3 Factors that promoted realization of effect

- (1) Factors concerning planning
 - None
- (2) Factors concerning Implementation process
 - The Project has been working to continuously implement project activities by coordinating with the Lao side through remote communication, and utilizing various alternative methods, such as the organization of on-line training, dissemination of video technical manual, and public relations utilizing SNS.

3-4 Factors that inhibited realization of effect

- (1) Factors concerning planning
 - None.
- (2) Factors concerning Implementation process
 - The outbreak and spread of COVID-19 and the resultant restrictions for instance on movement largely affected the performance of the Project in general, obliging the Project to undertake modifications from the original plans concerning various activities. In many cases, planned activities at the provincial and district levels, dispatch of short-term experts from Japan, and training programs in Japan have been postponed or cancelled.

3-5 Conclusion

This Project is in line with the policies and needs of Lao PDR and the development assistance policies of Japan. The planning is appropriate. Therefore, the significance of

the implementation is high. Relevance of the Project is deemed high, as the Project is in line with the development policies and needs of Lao PDR. Coherence is assessed relatively high, in view of the coherence with the cooperation policies and directions of the Japanese government as well as existent and potential synergies with JICA's other projects and those of other development organizations. Effectiveness is deemed varied among the pilot provinces, as the degrees of achievement in terms of increase in the number of farmer group members, production volume and sales volume differ. Impact is assessed as relatively high, considering the achievement of the Overall Goal, and generally positive long-term effects. Efficiency is assessed as medium since the implementation of the Project activities required various modification due largely to COVID-19. Sustainability is assessed medium to relatively high, when comprehensively considering political/policy, institutional/organizational, technical and socio-economic aspects.

3-6 Recommendations

- (1) To the project team (to be addressed by the end of the project period)
 - In addition to disseminating the technical manuals developed by the project to project stakeholders, the project will work to disseminate the technical manuals to agricultural educational institutions and farmer organizations for the promotion of clean agriculture.
 - As there were no opportunities for organic farmer groups to exchange and learn from each other for two and a half years after COVID-19 occurred in early 2020, the final seminar at the end of the Project will provide an opportunity for farmers/farmer groups to introduce their initiatives and learn from each other through the exchange of opinions.
 - Since it has been confirmed that the indicators of the overall goal of the Project are almost achieved at this point, the indicators of the overall goal will be redefined based on the observations made in the final evaluation survey.
- (2) After the completion of the Project
 - The promotion of organic agriculture requires not only improved technology and productivity on the part of producers, but also increased awareness of organic agricultural products among consumers and actual behavior change (purchase of organic products) to become firmly established. For the promotion of organic agriculture, patient support from the government until take-off and awareness-raising among consumers and buyers are important, and the government will continue to patiently support farmer groups and OA markets.
 - In the capital city of Vientiane, the OA Committee is managing the OA market autonomously and appropriately, and the cooperation between the OA Committee and the administration is working well. This can be used as a model case for CA promotion through collaboration between the OA Committee and the government to promote clean agriculture in other regions.
 - Use the technical manuals in trainings conducted by CASC and maintain an appropriate YouTube channel where the technical manuals are posted.
 - With the economic development of Laos, interest in clean agriculture is increasing, but the strengthening of the system has not kept pace, and organic certification is taking time.

Appropriate and prompt certification procedures are important for the promotion of clean agriculture, and efforts will be made to strengthen the system.

3-7 Lessons Learned

- This project took an FVC approach, which was a new approach for Laos. Since the FVC approach involves many elements from production to consumption and involves multiple departments within the Ministry of Agriculture and Forestry and other ministries, it is important to propose and implement a system that allows smooth implementation in collaboration with multiple departments and other ministries according to the country's situation.
- It is necessary to consider appropriate and available indicators when taking the FVC approach. In this project, production volume and sales volume were used as indicators, but since vegetables and fruits are targeted at small-quantity, diversified products and not specific crops such as rice, there are aspects where it is difficult to ascertain accurate indicator values. In addition, in this project, the weight of production volume was used as one indicator, but since the target crops are vegetables and fruits and not specific crops, there is a large difference in weight, and it cannot be said that an increase in weight equals an increase in productivity. The same is true for the sales volume. Furthermore, since information collection is also labor-intensive, it is necessary to consider indicators that can appropriately capture the increase in value-added and are relatively easy to obtain, in accordance with the nature of the project.