

Lao People's Democratic Republic

FY2024 Ex-Post Evaluation Report of Technical Cooperation Project

“Participatory Land and Forest Management Project for Reducing Deforestation” and

“Sustainable Forest Management and REDD+ Support Project”

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0. Summary

“Participatory Land and Forest Management Project for Reducing Deforestation” (hereinafter referred to as “PAREDD”) was implemented to establish a system for reducing deforestation and forest degradation, thereby contributing to the application of such a system in northern Lao P.D.R. “Sustainable Forest Management and REDD+ Support Project” (hereinafter referred to as “F-REDD”) was implemented to strengthen the capacity of institutions and human resources involved in REDD+¹ to promote sustainable forest management, thereby contributing to the promotion of sustainable forest management in Lao P.D.R.

From the commencement to the completion of both projects, the project was consistent with the development plan and needs of the Government of Lao P.D.R. The project plans and approaches were appropriate and aligned with Japan's ODA policy at the time of planning. Regarding internal coherence, synergies were generated between this project and other JICA-supported projects, including the reflection of pilot activities' results into policies and the verification of the effectiveness of approaches to reduce deforestation. In terms of external coherence, high synergies were achieved through collaboration with other donors in promoting REDD+. Therefore, relevance and coherence are very high. As a result of the implementation of the project, the Project Purpose—namely, the establishment of systems to reduce deforestation and forest degradation, and the strengthening of the capacity of institutions and human resources responsible for REDD+ in sustainable forest management—were mostly achieved. Furthermore, the Overall Goal of promoting sustainable forest management in Lao P.D.R. through the implementation of REDD+ was achieved to a certain extent. Therefore, effectiveness and impacts of the project are high. Both the project cost and the project period slightly exceeded the plan. Therefore, efficiency of the project is high. Regarding sustainability, sustainability is judged to be secured in the policy aspect. However, some issues have been observed in terms of the institutional/organizational, technical and financial aspects and they are not expected to be

¹ An abbreviation for Reducing Emissions from Deforestation and Forest Degradation, plus. It is a mechanism established under the United Nations Framework Convention on Climate Change (hereinafter, referred to as “UNFCCC”), whereby developed countries provide financial support (including funding) to developing countries in accordance with the amount of emissions reduced, when developing countries reduce greenhouse gas emissions through activities such as preventing deforestation and forest degradation and conserving forests.

improved/resolved within a short period. Therefore, sustainability of the project effects is moderately low. In light of the above, this project is evaluated to be satisfactory.

1. Project Description



Project Location (source: prepared by the external evaluator)



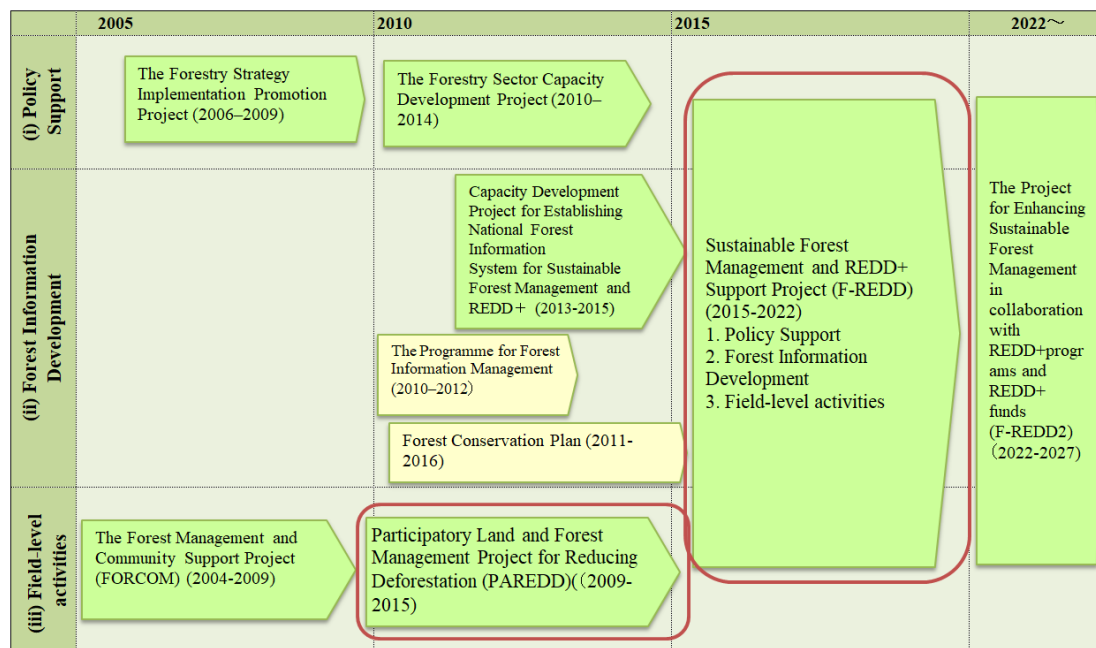
Forest viewed from Houaykhing Village, Phonsay District, Luang Prabang Province (source: photo taken by the external evaluator)

1.1 Background

In Lao P.D.R., forest coverage rate² exceeded 70 % in the 1940s; however, due to land-use changes associated with hydropower development, mining development, plantation development, and the expansion of slash-and-burn agriculture, it had declined to 40 percent by 2010. In response, the Government of Lao P.D.R. set a target to restore forest coverage rate to 70 percent and has been promoting REDD+. Since the late 1990s, JICA has provided broad support to the forestry sector in Lao P.D.R., ranging from policy support and forest information development at the central level to field-level activities at the local level. This support can be broadly classified into three areas: (i) forest policy development, support for the establishment of REDD+ frameworks, and donor coordination; (ii) forest information development and technical development related to REDD+; and (iii) field-level activities related to forest management (see Figure 1). With regard to (i), through the dispatch of individual experts, “the Forestry Strategy Implementation Promotion Project” (2006-2009) and “the Forestry Sector Capacity Development Project” (2010-2014) (hereinafter referred to as “FSCAP”), JICA supported the revision of the *Forestry Law*, the development of a legal framework for village land and forest use rights, and the formulation of the *Forest Strategy 2020* (hereinafter referred to as “FS2020”). Regarding (ii), through “Capacity Development Project for Establishing National Forest Information System for Sustainable Forest Management and REDD+” (2013-2015), key activities were undertaken, including the determination of national-level forest definitions and classification systems, the design of a national forest information database, and the examination of methodologies for the subsequent National Forest Inventory. With regard to (iii), the “Forest Management and

² Forest coverage rate (forests with a canopy cover of 20% or more and an area of 0.5 hectares or larger)

Community Support Project” (2004-2009) (hereinafter referred to as “FORCOM”), which preceded PAREDD, demonstrated community-based livelihood support activities aimed at establishing livelihood options that do not rely on slash-and-burn agriculture in six northern mountainous provinces where the poorest districts were concentrated, and PAREDD supported the development of the “PAREDD approach”³ as a participatory system for reducing deforestation, tailored to mountainous slash-and-burn agriculture areas in northern Lao P.D.R. Because most JICA-supported forestry sector projects, other than F-REDD, were scheduled to be completed by the first half of FY2015, F-REDD was formulated to succeed and integrate the effects of all three areas of cooperation in the forestry sector, including the operation of the Forest Sub-sector Working Group and the development of national forest monitoring systems. At the time of ex-post evaluation, the successor project, the “Project for Enhancing Sustainable Forest Management” in collaboration with REDD+ programs and REDD+ funds (F-REDD 2) (2022-2027), was under implementation.



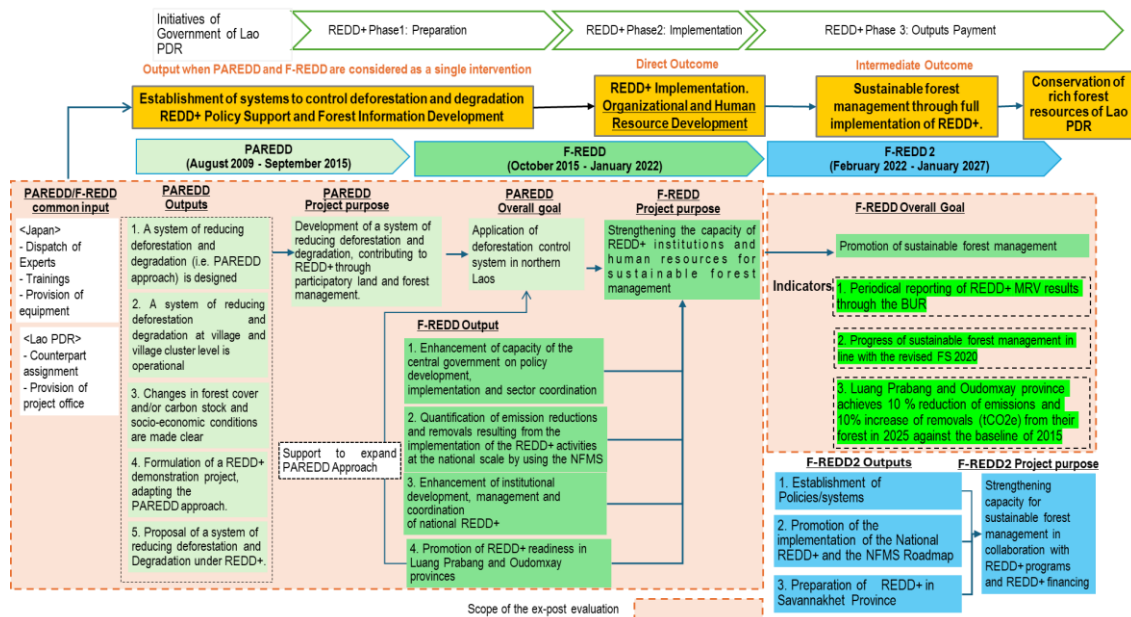
Source: Prepared by the external evaluator based on documents provided by JICA
The projects outlined in red indicate the projects subject to this ex-post evaluation.

Figure 1 JICA's Assistance in the Forestry Sector in Lao P.D.R.

³ The PAREDD approach places a revolving fund mechanism at its core to balance forest conservation and local livelihoods. Under this approach, a Village Development Fund is established within each village, and funds are circulated through a system of “repayment and re-lending.” A portion of the interest and other revenues generated by the Village Development Fund is also allocated to collective activities such as forest protection and environmental sanitation within the village. The Project provides seed money and Village Development Fund is established, while the village defines the loan conditions, eligible uses, and repayment methods. The basic flow of funds is as follows: small-scale loans are provided to community members (often organized in activity groups) for livelihood improvement activities (e.g., livestock raising, and the cultivation of vegetables and fruit trees); once income is generated, borrowers repay the principal and interest; the repaid funds are returned to the Village Development Fund; and the funds are then re-lent to subsequent households or groups (revolving fund mechanism). Project activities are categorized into three types: Type 1 (forest resource management), Type 2 (livelihood improvement activities), and Type 3 (community facilities). The Village Development Fund primarily functions as revolving capital for Type 2 activities.

This ex-post evaluation evaluates PAREDD and F-REDD in an integrated manner.

Figure 2 presents a logic diagram that illustrates the two projects in an integrated manner.



Source: prepared by the external evaluator

Figure 2 Logic Diagram Illustrating the Target Projects in an Integrated Manner

In evaluating the two projects in an integrated manner, this ex-post evaluation conducted an evaluation based on the six evaluation criteria in accordance with the following approach.

- **Relevance:** The consistency of the objectives of each project at the time of ex-ante evaluation and ex-post evaluation with the development plan and needs of the Government of Lao P.D.R. is confirmed. The appropriateness of the project plans and approaches is examined by regarding the two projects as a single project.
- **Coherence:** The consistency of each project with Japan's ODA policies at the time of ex-ante evaluation is confirmed. Internal and external coherence is examined by regarding the two projects as a single project.
- **Effectiveness/Impacts:** The degree of achievement of the Project Purpose and Overall Goal of each project is confirmed. The evaluation judgment is made mainly based on the results of the successor project (F-REDD), referring to the achievements of the preceding project (PAREDD). Impacts are evaluated by regarding the two projects as a single project and by confirming positive and negative changes brought about by the two projects.
- **Efficiency:** It is evaluated by aggregating the project costs and project periods of each project.
- **Sustainability:** It is examined by regarding the two projects as a single project.

1.2 Project Outline

		PAREDD	F-REDD
Overall Goal		A system of reducing deforestation and degradation, contributing to REDD+ is applied in the northern part of Laos.	Sustainable forest management is promoted through full implementation of REDD+ and in coordination with the Forest Strategy. ⁴
Project Purpose		A system of reducing deforestation and degradation, contributing to REDD+, is developed through participatory land and forest management.	Capacity for sustainable forest management is strengthened through incorporation of REDD+ into the sector strategy and improvement of forest resource information.
Output	Output 1	A system of reducing deforestation and degradation at village and village cluster level (i.e., PAREDD approach) is designed through improvement of Community Support Programme Tool (CSPT) developed by the preceding FORCOM project. ⁵	Capacity of the central government on policy development, implementation and sector coordination is enhanced.
	Output 2	A system of reducing deforestation and degradation at village and village cluster level is operational in the selected village clusters (i.e., PAREDD sites). ⁶	Emission reductions and removals resulting from the implementation of the REDD+ activities are quantified at the national scale by using the National Forest Management System (hereinafter referred to as “NFMS”).
	Output 3	Changes in forest cover and/or carbon stock and socio-economic conditions are made clear in and around the PAREDD sites.	Institutional development, management, and coordination of national REDD+ is enhanced.
	Output 4	A REDD+ demonstration project, adapting the PAREDD approach as mitigation measure, targeting one of the PAREDD sites, is formulated.	REDD+ readiness in Luang Prabang Province and Oudomxay Province is enhanced.
	Output 5	A system of reducing deforestation and degradation is proposed as a mitigation measure for climate change under REDD+.	
Total cost (Japanese Side)		575 million yen	939 million yen
Period of Cooperation		August 2009 - September 2015 (Extended Period: September 2014-September 2015)	December 2014 - January 2022 (Extended Period: October 2020-January 2022)

⁴ The following is the English translation in the Japanese version of the PDM: Sustainable forest management is promoted through the full implementation of REDD+ in Lao P.D.R. (“and in coordination with the Forest Strategy” is not stated and “in Laos” is stated in Japanese version).

⁵ The following is the English translation in the Japanese version of the PDM: A system of reducing deforestation and degradation at village and village cluster level is designed through improvement of Community Support Programme Tool (CSPT) developed by the preceding FORCOM project (“(i.e., PAREDD approach)” is not stated in the Japanese version).

⁶ The following is the English translation in the Japanese version of the PDM: A system of reducing deforestation and degradation at village and village cluster level is operational in the selected village clusters. (“(i.e., PAREDD sites).” is not stated in the Japanese version).

Target Area	Luang Prabang Province	Lao P.D.R. nationwide (the pilot projects were implemented in Luang Prabang Province and Oudomxay Province)
Implementing Agency	Department of Forestry and National Agriculture and Forestry Extension Service, Ministry of Agriculture and Forestry	Until July 2016: Ministry of Natural Resources and Environment, Department of Forest Resource Management, Provincial Natural Resources and Environment Office of Luang Prabang Province After August 2016: Ministry of Agriculture and Forestry, Department of Forestry, Provincial Agriculture and Forest Office of Luang Prabang Province, Provincial Agriculture and Forest Office of Oudomxay ⁷
Other Relevant Agencies/ Organizations	None	None
Consultant/ Organization in Japan	Forestry Agency	Kokusai Kogyo Co., Ltd.
Related Projects	[Technical Cooperation] • “The Forest Management and Community Support Project” (2004-2009) • “The Forestry Strategy Implementation Promotion Project” (2006-2010) • “The Forestry Sector Capacity Development Project” (2010-2014) • “Capacity Development Project for Establishing National Forest Information System for Sustainable Forest Management and REDD+” (2013-2016) [Grant Aid] • “Forest Conservation Program (March 2010) • “The Programme for Forest Information Management (March 2010) [Other donors] • GIZ “Climate Protection through Avoided Deforestation Project” (CliPAD) (2014-2018) • World Bank “Second Lao Environment and Social Project” (hereinafter referred to as “LENS2”) (2014-2023) • Green Climate Fund (GCF) / GIZ “Implementation of the Lao P.D.R. Emission Reductions Programme through Improved Governance and Sustainable Forest Landscape Management” (hereinafter referred to as “I-GFLL”)	

⁷ At the beginning of the project, the implementing agency was the Ministry of Natural Resources and Environment. However, Prime Minister’s Decree No. 57 issued in July 2016 mandated the reintegration of the ministry’s forest management functions into the Ministry of Agriculture and Forestry. Subsequently, Prime Minister’s Decree No. 99 issued in March 2017 redefined the organizational structure and authorities of the Ministry of Agriculture and Forestry, including the Department of Forestry. Reflecting these institutional changes, the Fourth Joint Coordinating Committee in February 2018 agreed on the new counterpart agency. Furthermore, in June 2025, the Ministry of Agriculture and Forestry was merged with the Ministry of Natural Resources and Environment to form the Ministry of Agriculture and Environment. In this report, the implementing agency is referred to as the “Ministry of Agriculture and Forestry,” consistent with its name during the project implementation period.

1.3 Outline of the Terminal Evaluation⁸

1.3.1 Achievement Status of Project Purpose at the Terminal Evaluation

The degree of achievement of the Project Purpose at project completion is as described in “3.2 Effectiveness and Impacts.” The outline of F-REDD at project completion is as follows.

1.3.2 Achievement Status of Overall Goal at the Terminal Evaluation

At the time of project completion, the prospect of achieving the Overall Goal of F-REDD— “Sustainable forest management is promoted through full implementation of REDD+”—was judged as “relatively high” based on the outlook for the three indicators. Regarding the first indicator, “REDD+ MRV periodically reported through the BURs,” although the relevant staff of the Department of Forestry gained knowledge through the implementation of the first national Measurement, Reporting and Verification⁹ (hereinafter referred to as “MRV”), the preparation of the MRV report and responses to questions from UNFCCC experts relied heavily on support from the project experts. Furthermore, the preparation and submission of a new safeguard report¹⁰ to the UNFCCC, progress reporting on the development of the Safeguard Information System and the NFMS, and other tasks required for results-based payment necessitated continued capacity development through cooperation with development partners. Therefore, the prospects for achievement of this indicator was assessed as moderate. For the second indicator, “Sustainable forest management shows progress in line with the revised *FS2020*¹¹,” due to the Government’s strong commitment to improving forest coverage rate the support from existing and planned development partners, progress in important activities under the revised *FS2020* was anticipated. Accordingly, the prospects for achievement were judged as “relatively high.” For the third indicator, “Luang Prabang and Oudomxay Provinces achieve 10% reduction of emissions and 10% increase of removals from their forest in 2025 against the baseline of 2017,” the high results observed in the northern region, including both provinces, during the first national MRV, the implementation of I-GFLL 1, and the anticipated implementation of I-GFLL 2 as well as the investment in the region through results-based payments from the Forest Carbon Partnership Facility (FCPF)

⁸ In the ex-post evaluation report, in the case of phased projects, the outline of the terminal evaluation of the final phase is to be described; however, since the terminal evaluation was not implemented for F-REDD, the outline at the time of project completion is described.

⁹ Activities to measure, report, and verify reductions in carbon dioxide emissions and increases in carbon absorption (Measurement, Reporting and Verification). Within the FCPF, this is referred to as MMR (Measurement, Monitoring and Reporting).

¹⁰ A report prepared and submitted by each country to avoid environmental and social risks and to ensure sustainable benefits in implementing REDD+.

¹¹ A forestry-sector policy titled “*Forestry Strategy to the Year 2020*,” aimed at managing and expanding forest resources. It was approved by the Prime Minister’s Office under Decree No. 229/PM dated July 9, 2005. Its revised version is the *FS2035*.

Carbon Fund suggested the prospects for achievement of further results, so the prospects for achievement of this indicator was judged as “relatively high.”

1.3.3 Recommendations in the Project Completion Report

As matters to be implemented to achieve the Overall Goal, continued capacity development and technical support were recommended.¹² Because limitations were observed in the number and capacity of personnel in the forestry sector of Laos, as well as in responding to the increasingly sophisticated REDD+ systems and technologies, further capacity development, beyond what had previously been provided, and the expansion of the pool of experts and consultants who could offer cooperation were deemed essential. Moreover, linking project results with REDD+ results-based payments requires preparation and submission of a new safeguard report to the UNFCCC as well as progress reporting on the development of the Safeguard Information System and the NFMS and continued capacity development through cooperation with development partners was considered indispensable. In this regard, the Department of Forestry recognized the knowledge and experience gained by staff through the support of F-REDD and expressed the intention to participate in seminars and similar opportunities offered by international organizations to acquire and apply increasingly advancing sophisticated systems and technologies.

2. Outline of the Evaluation Study

2.1 External Evaluator

Maki Hamaoka, Atsushi Kimura,¹³ Foundation for Advanced Studies on International Development

2.2 Duration of Evaluation Study

This ex-post evaluation study was conducted with the following schedule.

Duration of the Study: October 2024-February 2026

Duration of the Field Study: February 2-February 18, 2025, and June 23-June 28, 2025

2.3 Constraints During the Evaluation Study

Regarding Indicator 2 of F-REDD’s Overall Goal, “Sustainable forest management shows progress in line with the revised FS2020,” there was no shared understanding among parties concerned with the project regarding the definition of the indicator or the monitoring method, which made it difficult to judge the degree of achievement. For Indicator 2, based on

¹² F-REDD Project Completion Report (Term II) pp.87-99

¹³ Kimura (in charge of satellite data utilization) belongs to Pasco Corporation and participated as a reinforcement.

consultations with Japanese experts of F-REDD, the evaluators recognized the degree of achievement of the eight targets set out in “2.4 Targets and Expected Outcomes” of the FS2035—the revised version of FS2020—as indicating progress in sustainable forest management; however, since FS2035 had only just been approved in May 2024, the level of achievement was judged by assessing whether activities toward these targets were progressing, based on the monitoring results for the eight targets mentioned above by the Government of Lao P.D.R. In addition, for Indicator 3, “Luang Prabang and Oudomxay Provinces achieve 10% reduction of emissions and 10% increase of removals from their forest in 2025 against the baseline of 2017,” field data collection and subsequent data analysis were underway in accordance with the plan to publish the indicator results on the Ministry of Agriculture and Forestry’s NFMS at the end of 2025. Although these tasks were progressing as planned, the results could not be obtained by the time of preparing the Japanese report for this ex-post evaluation; therefore, in the ex-post evaluation, the degree of “promotion of sustainable forest management,” which is the Overall Goal, was verified through the collection of qualitative complementary indicators.

3. Results of the Evaluation (Overall Rating: B¹⁴)

3.1 Relevance/Coherence (Rating: ④¹⁵)

3.1.1 Relevance (Rating: ③)

3.1.1.1 Consistency with the Development Plan of Lao P.D.R.

At the time of ex-ante evaluation of PAREDD, the 6th *National Socio-Economic Development Plan (NSED) (2006-2010)* set targets in the social and environmental sector to reduce the proportion of poor households to less than 15% of all households and to increase the forest coverage rate to over 50%.¹⁶ At the time of PAREDD’s completion and F-REDD’s planning, the 7th *NSED (2011-2015)* set forth a policy to completely eliminate slash-and-burn agriculture and make Laos a country rich in greenery, aiming to raise the forest coverage rate to 65% by 2015 and promoting natural regeneration and reforestation in degraded areas.¹⁷ At the time of project completion of F-REDD, the 9th *NSED (2021-2025)* set a target to increase the forest coverage rate to 70% and continued to place emphasis on natural regeneration and reforestation in degraded areas. Therefore, it can be judged that from the time of the ex-ante evaluation to the time of project completion, PAREDD and F-REDD were consistent with the development plan of the Government of Lao P.D.R.

¹⁴ A: Highly satisfactory, B: Satisfactory, C: Partially satisfactory, D: Unsatisfactory

¹⁵ ④: Very High, ③: High, ②: Moderately Low, ①: Low

¹⁶ FORCOM Ex-post Evaluation Report (2011), p.5

¹⁷ *The Seventh Five-Year National Socio-Economic Development Plan (2011-2015)* p.84

3.1.1.2 Consistency with the Development Needs of Lao P.D.R.

The forest coverage rate of Laos was over 70% in the 1940s, but due to land-use changes and the expansion of slash-and-burn agriculture, it declined to 40% in 2010. It was 58%¹⁸ in 2015 and 57%¹⁹ in 2022. Although the forest coverage rate is on a recovering trend, there remains a gap with the policy target of *FS2020* and its successor *FS2035*, which is “forest coverage rate of 70% by 2030,” and the need to continue efforts to strengthen forest management is recognized.

3.1.1.3 Appropriateness of the Project Plan and Approach

(1) Lessons Learned from Past Similar Projects and Their Application to This Project

In FORCOM, the predecessor project of PAREDD, a two-office structure was adopted: four experts were stationed at the local office in Luang Prabang Province, which was closer to the field, while one expert was assigned to the office in the capital to conduct coordination work at the central level. As a result of concentrating field activities in Luang Prabang Province, outcomes were generated, and at the same time, coordination work to support field activities at the central level was carried out smoothly. In PAREDD as well, during the first half of the project—when field activities were concentrated—the same two-office structure as in FORCOM was planned, and in the latter half, emphasis was to be placed on promoting the reflection of the results in policies and systems, including considering the reallocation of experts.²⁰ In PAREDD, although only one office was established in Luang Prabang Province, the coordination work to support field activities was smoothly carried out by conducting coordination and communication at the central level in collaboration with FSCAP, as described in “3.1.2.2 Internal Coherence.”²¹

Regarding F-REDD, the ex-ante evaluation sheet included the application of Lesson 3 in JICA’s *“Knowledge and Lessons Learned in the Field of Natural Environment Conservation”* (2015): “For projects involving afforestation or resource management that require time before effects emerge, it is useful to adopt a program approach perspective, including phasing and collaboration with other organizations.” F-REDD was formulated with the aim of more effectively and efficiently implementing the following three sets of projects that had previously been carried out independently: (i) field-level deforestation control activities under PAREDD, (ii) policy support at the central level under FSCAP, and (iii) forest information development under the technical cooperation project “Capacity Development Project for Establishing National Forest

¹⁸ Documents provided by JICA

¹⁹ Data provided by the implementing agency

²⁰ PAREDD ex-ante evaluation sheet, p.11

²¹ Interview with and answers to the questionnaire by the PAREDD experts

Information System for Sustainable Forest Management and REDD+” (2013-2016).²² Furthermore, Lesson 12 stated, “In cases where the involvement of a wide variety of stakeholders—such as other relevant ministries and agencies of the central government, local governments, NGOs, and the private sector—is indispensable, it is effective to clarify the division of responsibilities and to establish a framework (platform) through which multiple stakeholders can consult, coordinate, and make decisions.”²³ Since around 2007, JICA served as the secretariat of the Forest Sub-Sector Working Group, and the abovementioned framework refers to its operation. When the “Forest Law” was revised in 2019, a drafting committee comprising director-general-level officials from relevant ministries was established. F-REDD supported the activities of the drafting committee and its secretariat, and interim progress was reported to and discussed in the Forest Sub-Sector Working Group. In this way, consultations and coordination among multiple relevant organizations were conducted through the Forest Sub-Sector Working Group.

Based on the above, the “lessons from past similar projects” described in the ex-ante evaluation sheet were generally applied appropriately.

(2) Considerations for and Fairness toward Marginalized People

In the ex-ante evaluation of PAREDD, based on the experience of the predecessor project FORCOM, it was stated that attention should continue to be paid to ensuring that livelihood improvement activities should not exacerbate the gap between rich and poor, by including poor households within the groups.²⁴ It was also stated that, during the process of formulating land and forest use plans and implementing livelihood improvement activities through CSPT, the opinions of women and ethnic minorities should be actively incorporated through participatory approaches, and care should be taken to avoid negative impacts on them.²⁵ In PAREDD, site selection was based on criteria such as: (i) forest loss due to slash-and-burn agriculture was progressing but forests remained, (ii) accessibility, and (iii) whether the target site was positioned within poverty-reduction measures of provincial or district development plans.²⁶ During implementation, household-level participation in livelihood improvement activities were encouraged, and a certain proportion of participating households were poor households. In addition, when calling for participation of residents, women’s participation was encouraged, and during activity-plan formulation, group discussions

²² Answers to the questionnaire by JICA

²³ F-REDD ex-ante evaluation sheet, p. 5

²⁴ PAREDD ex-ante evaluation sheet, p. 10

²⁵ PAREDD ex-ante evaluation sheet, p. 10

²⁶ Document provided by JICA

were conducted by ethnicity and by gender. Opinions gathered from women during group discussions—such as the locations of fuelwood collection—were utilized when formulating village land-use plans.²⁷

Regarding consideration for ethnic minorities, in PAREDD’s target areas, villages were composed either of a single ethnic group—such as Lao, Khmu, or Hmong—or of mixed groups. Particularly in cases of mixed ethnic composition, group discussions were conducted separately by ethnicity during the formulation of village land-use plans, forest-management activities, and livelihood improvement activities. In F-REDD, PAREDD-approach expansion was included in the activities, and in pilot activities implemented in Luang Prabang and Oudomxay Provinces, the above arrangements—designed to facilitate poor households’ and women’s participation—were maintained.²⁸

Based on the above, considerations for marginalized people were appropriately made.

3.1.2 Coherence (Rating: ④)

3.1.2.1 Consistency with Japan’s ODA Policy

At the time of planning of PAREDD, the *Country Assistance Program for the Lao People’s Democratic Republic* (2006) included “rural area development and the development of sustainable forest resources,” as well as “improvement of administrative capacity and institutional development,” as priority areas.²⁹ At the time of planning F-REDD, the *Country Assistance Policy for the Lao People’s Democratic Republic* (2012) positioned “the development of agriculture and forest conservation” as a priority sector.³⁰ In light of the above, the project objectives were consistent with Japan’s ODA policy at the time of planning.

3.1.2.2 Internal Coherence

Collaboration between this project and other JICA projects was carried out by making use of the characteristics of each project, as shown below, and certain synergistic effects were generated.

- Collaboration between PAREDD and FSCAP

At the time of FSCAP’s planning, FSCAP was expected to respond flexibly to urgent issues of the Department of Forestry and to coordinate with other donors, and to have a coordination function with other Japanese projects.³¹ FSCAP, taking advantage of having an office within the Department of Forestry, served as a liaison between

²⁷ Interview with and answers to the questionnaire by the PAREDD experts

²⁸ Field survey in February 2025, interviews in two districts of Luang Prabang Province and three villages in two districts of Oudomxay Province

²⁹ PAREDD Detailed Planning Survey Report, p.19

³⁰ F-REDD ex-ante evaluation sheet, p. 2

³¹ FSCAP Detailed Planning Survey Report, p.10

PAREDD and the Department of Forestry and fed back the results of project activities into policy formulation at the national level. In practice, the results of the REDD+ pilot activities implemented by PAREDD in the field were shared with other donors through the Forest Sub-sector Working Group, which FSCAP supported. Furthermore, counterparts of PAREDD participated in REDD+ training organized by FSCAP, thereby strengthening the capacity of the counterparts.

- Collaboration between PAREDD and the “Capacity Development Project for Establishing National Forest Information System for Sustainable Forest Management and REDD+”

When land use plans in PAREDD target villages were formulated, counterparts of the “Capacity Development Project for Establishing National Forest Information System for Sustainable Forest Management and REDD+” used satellite images to strengthen the capacity of the PAREDD counterparts. Subsequently, the counterpart at the Luang Prabang Provincial Agriculture and Forestry Office proactively facilitated project activities in JICA and other donor projects, and the collaboration between the two projects contributed to the development of province-level counterparts.³² In addition, monitoring of land use in PAREDD target sites was conducted under the “Capacity Development Project for Establishing National Forest Information System for Sustainable Forest Management and REDD+”.³³ Moreover, PAREDD provided the project with data and information necessary for the design of the National Forest Inventory, and this collaboration contributed to the development of the Lao National Forest Inventory.³⁴

- Collaboration between F-REDD and the Environmental Program Grant Aid “Forest Conservation Program” (2010)

In advancing the pilot activities for protection forest³⁵ management plans in Luang Prabang Province and Oudomxay Province, the guidelines for preparing protection forest management plans which had been supported under the Environmental Program Grant Aid “Forest Conservation Program” were utilized.³⁶

³² Interview with the PAREDD experts

³³ Interview with the PAREDD experts

³⁴ “Capacity Development Project for Establishing National Forest Information System for Sustainable Forest Management and REDD+” Project Completion Report (Term II) pp.3-27

³⁵ The *Forestry Law of Laos* (revised in 2019) classifies forests into three categories: Protection Forest, Conservation Forest, and Production Forest. Article 15 of the Law defines Protection Forests as forests classified for the purpose of maintaining functions such as water resources, forests along riverbanks and roadsides, prevention of soil erosion and improvement of soil quality, strategic areas for national defense and security, protection from natural disasters, environmental protection, and other related functions.

³⁶ F-REDD Project Completion Report (Term II) p.70

3.1.2.3 External Coherence

In this project, multiple cases of collaboration and coordination with other donors, as well as their synergistic effects, were confirmed. In particular, F-REDD collaborated with many other donors in technical and financial aspects. Major examples of collaboration are shown below.

- Collaboration with the GCF/GIZ “I-GFLL”

In November 2021, JICA and GIZ signed a memorandum of mutual cooperation concerning the GCF project, and under Activity 4.3 of the PDM, “Expand the developed Provincial Deforestation Monitoring System (hereinafter referred to as “PDMS”) to the provinces targeted by the Emission Reduction Program of the FCPF Carbon Fund,” technical assistance to the Department of Forestry was implemented in cooperation with the GCF/GIZ and other projects. Specifically, whereas GCF / GIZ’s

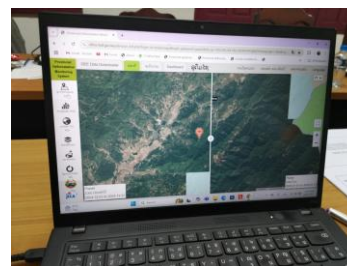


Photo 1: Forest monitoring using the PDMS by the Oudomxay Provincial Agriculture and Forestry Office (Source: photo taken by the external evaluator)

I-GFLL Project bore the cost of forest degradation monitoring, F-REDD provided technical assistance for the development and operation of the PDMS, thereby strengthening forest monitoring in six target northern provinces.³⁷

- Collaboration with the World Bank “LENS2”

In the two districts of Luang Prabang District and Nan District in Luang Prabang Province, land use planning and forest-management/livelihood improvement activities using the PAREDD approach were implemented using LENS2 funds. F-REDD mainly collaborated by implementing the upstream components, such as formulating forest-management plans and preparing village land use plans in 2 out of 15 villages inside and outside protection forests, whereas LENS2 implemented activities in the remaining villages. At that time, one of the staff members of the Luang Prabang Provincial Agriculture and Forestry Office, who had participated as a counterpart in JICA technical cooperation since FORCOM, served as trainer in the LENS2 training of trainers, applying the knowledge accumulated to date.³⁸

Behind such collaboration and coordination with other donors functioning

³⁷ F-REDD Project Completion Report (Term II) p.32

³⁸ F-REDD Project Completion Report (Term II), p.67 and p.76; interviews with and answers to the questionnaire by the expert, interviews with and answers to the questionnaire by the Provincial Agricultural and Forest Offices

effectively, the following factors are considered: i) up to that point, JICA's support to the Lao forestry sector had included policy support to the Ministry of Agriculture and Forestry through two technical cooperation projects (see Figure 1), and longstanding good relationships had been built between JICA and other donors at the central level; ii) the Government of Lao P.D.R. and donors shared a clear common objective of promoting forest conservation toward results-based payments under REDD+; iii) stakeholders maintained close, day-to-day communication and were aware of each other's interests; for example, JICA recognized that GIZ intended to significantly advance the implementation of REDD+ by using international funds from the GCF. The six northern provinces targeted by the GCF/GIZ I-GFLL included the two northern provinces (Luang Prabang and Oudomxay) that JICA had been supporting, making it possible to expect expansion of F-REDD's effects. Parties concerned with JICA, recognizing that they could not procure large funds, such as from loans, coordinated with GIZ so that the two northern provinces could be covered with such large-scale financing. In this way, GIZ assumed the role of scaling up effects that could not be achieved by JICA alone.

In the F-REDD ex-ante evaluation sheet, it was stated that regarding aid activities of other donors, "Through the Forest Sub-Sector Working Group, efforts will be made to promote demarcation and coordination with other donors, and to exchange knowledge obtained in each project," and coordination and information exchange between this project and other institutions had been planned. The above-mentioned activities and technical effects toward the promotion of REDD+ with GIZ and the World Bank can be regarded as collaboration/coordination beyond what was envisaged at the time of ex-ante evaluation.

The project objectives were consistent with the development plan of the Government of Lao P.D.R., which emphasized increasing forest coverage rate through sustainable forest management, and the necessity of engaging in sustainable forest protection and restoration in Laos is high, aligning with the development needs of Laos. Furthermore, lessons from similar past projects were utilized in project implementation, and the approach was appropriate. The project objectives were also aligned with the Japan's ODA policy for Lao P.D.R. at the time of ex-ante evaluation. Interlinkages with other JICA projects were expected at the planning stage, and through collaboration with projects that supported central-level policies and projects that developed forest-information systems, the project generated effects such as feeding back field activities into policy, verifying the effectiveness of deforestation-control approaches, and strengthening the capacity of counterparts.

Moreover, in F-REDD, collaboration with other donors was incorporated into the activities from the project formulation stage, and strong synergistic effects emerged in the promotion of REDD+. Therefore, its relevance and coherence are very high.

3.2 Effectiveness and Impacts³⁹ (Rating: ③)

3.2.1 Effectiveness

3.2.1.1 Achievement of Project Purpose

PAREDD developed and supported formulation of land use plans in Xiengnong District and Phonsay District of Luang Prabang Province to distinguish forests to be conserved from production areas to be utilized and to develop appropriate plans, appropriate forest management in the demarcated land areas, and livelihood improvement activities centered on agriculture and village development activities as the PAREDD approach. Furthermore, from the latter half of the project period, “REDD+ Validation and Registration Support Services” aimed at certification and registration as a REDD+ project were implemented as one component of the project, targeting the Houaykhing village cluster⁴⁰ in Phonsay District, Luang Prabang Province, and its surrounding areas.

F-REDD supported the revision of the *Forest Law* in 2019, the implementation of *FS2020*, and the formulation of *FS2035* as support in the areas of forest policy. Regarding REDD+ institutional development support and donor coordination, among the six working groups established under the National REDD+ Task Force, F-REDD supported the establishment and operation of the REL (Reference Emission Level)/MRV Working Group⁴¹ as the lead partner, as well as the establishment and operation of the remaining five working groups. In addition, it supported the development of PDMS and NFMS as part of the forest information development. Furthermore, it promoted REDD+ readiness at the provincial level in Luang Prabang Province and Oudomxay Province as pilot provinces. The achievement status of the Project Purpose of PAREDD and F-REDD is shown below.

³⁹ When providing the sub-rating, Effectiveness and Impacts are to be considered together.

⁴⁰ A village cluster refers to a unit in which multiple villages are regarded as a group (cluster) and jointly formulate development plans. In Lao P.D.R., a village is one of the smallest administrative units.

⁴¹ Regarding REDD+ in Lao P.D.R., working groups were established under the National REDD+ Task Force. After the Vice Minister of Agriculture and Forestry assumed the position of Chair of the National REDD+ Task Force in May 2017, these working groups were reviewed, and finally, in September 2018, the TORs and members of six working groups were determined. The six working groups are: 1. Legal framework; 2. Land tenure and land use; 3. REL/MRV (reorganized into the NFMS Working Group in July 2021); 4. Social and Environmental Safeguards; 5. Benefit Sharing Mechanism; and 6. Enforcement and implementation of mitigation.

Table 1 Achievement of Project Purpose (PAREDD)

Project Purpose	Indicator	Actual
A system of reducing deforestation and degradation, contributing to REDD+, is developed through participatory land and forest management.	Indicator ^{Note a:} Restriction of forest resource access and income generation without negative impact on the forest is realized by the initiative of villagers in Xiengngun and Phonsay Districts.	Status of achievement: mostly achieved as planned. - Among the two target districts, in Xiengngun District, the results of the socioeconomic impact survey confirmed that no new slash-and-burn agriculture was identified in the forest protection areas designated under the land use plan. - In Phonsay District, the results of the socioeconomic impact survey conducted under the project confirmed that the livelihood improvement activities implemented under the PAREDD approach contributed to the socio-economic development of the Houaykhing village cluster. In addition, the results of the forest cover and land use survey conducted under the project in 2015 showed that regarding land use, the land use plan was generally complied with, including compliance with zoning and the thorough dissemination of land use regulations.⁴² Furthermore, it was confirmed that no conversion to agricultural land was observed in areas designated as conservation and protection forests, that land use for slash-and-burn agriculture decreased due to the livelihood improvement activities, and that the rate of deforestation was low.
	Indicator b: By August 2014, a report regarding validation/registration of a REDD+ demonstration project, adapting the PAREDD approach as mitigation measure, is comprehended by the relevant authorities concerned.	Status of achievement: mostly achieved as planned. Although slightly delayed from the plan, the following peer reviews ⁴³ were conducted: - Primary review (until July 20th, 2014): Assessment based on the VCS ⁴⁴ certification criteria and applied methodology. - Secondary review (until August 10th, 2014): Assessment on greenhouse gases (hereinafter referred to as “GHG”) emissions calculations, map formulation, deforestation factors, etc. was conducted. - Final review: Project Description that had been improved based on the results of the secondary review was reviewed. The final results were presented by the designated operational entity.⁴⁵

Source: Prepared by the external evaluator based on the Terminal Evaluation report and documents provided by JICA.

Note: Prior to the implementation of the terminal evaluation, the indicators for the Project Purpose were: “Indicator a: By the project end, a field operational manual on the system of reducing deforestation at village and village cluster level, i (the PAREDD approach), linked to REDD+, is approved by the relevant authorities of Luang Prabang Province” and “Indicator b: By the end of the project, a REDD+ demonstration project that adopts the PAREDD approach as a climate change mitigation measure is registered under a REDD+ financial incentive scheme.” The terminal evaluation team judged that the original indicators alone were not sufficient to accurately evaluate activities related to reducing and controlling deforestation and forest degradation in the target areas, and therefore, in order to appropriately evaluate the effects of project implementation, set the above two alternative indicators through consultations with parties concerned with the project.

⁴² Documents provided by JICA

⁴³ In the project, after completion of the first draft of the Project Description for the REDD+ demonstration project, revisions to the Project Description were to be made as necessary while monitoring the progress of project activities, and by the end of the project, the final draft of the Project Description was to be subjected to peer-review by experts (third parties) in the same field to demonstrate the validation of the PAREDD approach.

⁴⁴ An abbreviation of Verified Carbon Standard. A voluntary carbon credit certification scheme and a standard for carbon accounting.

⁴⁵ Project Completion Report of the REDD+ Validation and Registration Support Services for Participatory Land and Forest Management Project for Reducing Deforestation in Lao P.D.R., p.46

Table 2 Achievement of Project Purpose (F-REDD)

Project Purpose	Indicator	Actual
Capacity for sustainable forest management is strengthened through incorporation of REDD+ into the sector strategy and improvement of forest resource information.	Indicator 1: Revised <i>FS2020</i> approved.	Status of achievement: mostly achieved as planned. At the project completion, the final draft of the revised <i>FS2020</i> was approved by the Ministry of Agriculture and Forestry. Subsequently, the revised <i>FS2020</i> was approved by the Government of Lao P.D.R. as <i>FS2035</i> in May 2024. The main reasons for the delay from the original schedule included delays in work due to the COVID-19 pandemic and the time required to respond to comments from the Ministry of Agriculture and Forestry on the final draft. According to answers to the questionnaire by Japanese experts at the time of ex-post evaluation, although staff of Department of Forestry translated documents prepared by Japanese experts into Lao at the time of formulation of the <i>FS2020</i> , they prepared the documents during formulation of <i>FS2035</i> , confirming an improvement in policy formulation capacity as a result of technical assistance provided through the project.
	Indicator 2: The NFMS operational in compliance with the UNFCCC requirements.	Status of achievement: achieved beyond the plan. The operational plan of NFMS (the NFMS Roadmap) was approved in November 2020 by the Ministry of Agriculture and Forestry and the indicator was achieved. The appropriateness of the NFMS constructed through the project in accordance with UNFCCC requirements, as well as the operation of the NFMS in Lao P.D.R., were judged as valid based on the following. • NFMS was described in the REDD+ Technical Annex,⁴⁶ and the UNFCCC technical assessment was completed. • In accordance with the NFMS Roadmap, the NFMS Working Group and three sub-groups were operational, creating an environment conducive to the effective phased development of NFMS. • MRV plans for the Emission Reduction Program of the FCPF Carbon Fund were agreed upon in the Emission Reduction Agreement, and activities and capacity development toward emission reductions were implemented. At the start of the project, the target for this indicator was submission of the NFMS Roadmap to the Ministry of Natural Resources and Environment, which served as the UNFCCC focal point of the Government of Laos. The NFMS Roadmap was submitted to UNFCCC through the Ministry of Natural Resources and Environment and finalized after undergoing a technical assessment. Therefore, achievement of this indicator was judged as beyond the plan.
	Indicator 3: Based on the information	Status of achievement: mostly achieved as planned. Lao P.D.R. reported REDD+ results (emission reductions

⁴⁶ The Technical Annex on REDD+ is a technical document attached to the reports of REDD+ results that each country submits within the framework of the UNFCCC. REDD+ results are submitted as part of each country's Biennial Transparency Report (hereinafter referred to as the "BTR"), and, in this process, the REDD+-related section is submitted as a separate annex entitled "Technical Annex on REDD+ results." In order to access REDD+ results-based payment programs of the FCPF Carbon Fund and the GCF, the Technical Annex needs to be technically assessed by the UNFCCC and its reliability ensured.

	generated by the NFMS, effectiveness of REDD+ activities is evaluated among the stakeholders (e.g., MONRE, MAF, local government and development Partners) through a consultative process. Indicator 4: Results of the activities in Luang Prabang Province and Oudomxay Province are utilized for the formulation of national forestry/REDD+ policies.	and removals) for the results period of 2015-2018 to UNFCCC as a REDD+ Technical Annex in July 2020. The Safeguards Report ⁴⁷ for the same results period was approved in November 2020 and disclosed through UNFCCC. In the process of preparing the Safeguards Report, the implementation of policies and measures and the application of safeguards during the REDD+ results period were analyzed. Examples demonstrating effectiveness included enforcement against illegal logging (Prime Minister's Decree No. 15, 2016) and promotion of participatory land use planning and management. Status of achievement: achieved as planned. The results and lessons learned from REDD+ readiness support, pilot activities for deforestation countermeasures, and forest monitoring activities supported in Luang Prabang Province and Oudomxay Province were utilized for forest and REDD+ policy formulation in Lao P.D.R. • PDMS piloted in the abovementioned two provinces was positioned as a forest monitoring tool in the NFMS Roadmap. In the Emission Reduction Program of the FCPF Carbon Fund, deployment of PDMS to six northern provinces was planned, and through collaboration with GCF/GIZ I-GFLL, PDMS was expanded to Houaphanh Province and Sayaburi Province. • Based on provincial REDD+ action plans of six provinces, including Luang Prabang Province and Oudomxay Province, the Emission Reduction Program of the FCPF Carbon Fund was adopted and launched toward obtaining REDD+ results-based payments. The provincial REDD+ implementation framework established by this project was utilized as the implementation framework for I-GFLL. • The results and knowledge gained from pilot activities for deforestation countermeasures, namely the formulation and implementation of protection forest management plans in the two provinces, were fed back as useful examples in the revision of the prime minister's decree on protection forests, which was under revision.
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Source: Prepared by the external evaluator based on the F-REDD Project Completion Report (Term II) and answers to the questionnaires.

PAREDD promoted understanding and implementation of livelihood improvement activities that do not restrict access to forest resources or cause negative impacts on forests, and it can be said that the system for reducing deforestation and forest degradation through participatory land and forest management, namely the PAREDD approach, was established. Regarding F-REDD, through policy and institutional development, forest information development, utilization of field-level activities for forest and REDD+ policy formulation, clarification of REDD+ utilization strategies, and development of forest resource information, the capacity of institutions and human resources in charge of REDD+ in the central and local governments of Lao P.D.R. for sustainable forest management was

⁴⁷ Safeguards refer to the principles and institutional measures intended to ensure that REDD+ activities “do no harm to people and the environment,” and at the same time “do good by generating social and environmental benefits.”

strengthened. In light of the above, the project mostly achieved its purpose.

3.2.2 Impacts

The Overall Goal of PAREDD, “A system of reducing deforestation and degradation, contributing to REDD+ is applied in the northern part of Laos,” was achieved through Output 4 of F-REDD, “Promotion of REDD+ readiness in Luang Prabang Province and Oudomxay Province” (see Figure 2). The Overall Goal of F-REDD, “Sustainable forest management is promoted through full implementation of REDD+ and in coordination with the Forest Strategy,” was achieved to a certain extent with the support of F-REDD2 and other donors.

3.2.2.1 Achievement of Overall Goal

The achievement status of the Overall Goal of PAREDD and F-REDD is shown below.

Table 3 Achievement of Overall Goal (PAREDD)

Overall Goal	Indicator	Actual
A system of reducing deforestation and degradation, contributing to REDD+ is applied in the northern part of Laos.	Indicator 1: Within 3 years after the Project end, a REDD+ demonstration project ⁴⁸ registered through the Project is operational in Phonsay.	Status of achievement: achieved as planned. - As a JCM REDD+ project⁴⁹ of the Ministry of the Environment of Japan, the “REDD+ Project in Luang Prabang Province through Controlling Shifting Cultivation” was implemented from 2015 to 2019 with the objective of reducing deforestation and forest degradation in the Houaykhing village cluster in Phonsay District, Luang Prabang Province. Based on the achievements of PAREDD, the project implemented improvements in the governance framework for land and forest management at the village level, formulation of guidelines for activities in the Houaykhing village cluster, and technology transfer and capacity development (e.g., fertilizer improvement, livestock raising, and introduction of paddy rice cultivation). - F-REDD provided indirect support for the introduction of JCM REDD+ to Lao P.D.R., in line with institutional and technical developments of JCM REDD+. ⁵⁰
	Indicator 2: Within 3 years after the Project	Status of achievement: achieved as planned. Through “Activity 4-5: Strengthen the foundation to

⁴⁸ In the project, the demonstration project under Indicator 1 of the Overall Goal was defined as the commencement of a REDD+ project registered through the project within three years after the completion of the Project in Phonsay District, Luang Prabang Province (document provided by JICA).

⁴⁹ The Joint Crediting Mechanism (JCM) is a scheme jointly established and implemented under an agreement between the Government of Japan and the government of a JCM partner country, and it was launched in 2013. Under the JCM, the following are promoted: (1) accelerating the dissemination of advanced low-carbon technologies, products, systems, services, and infrastructure, as well as the implementation of mitigation activities, thereby contributing to sustainable development in developing countries; (2) quantitatively evaluating contributions to Japan’s reductions and removals of GHG emissions and utilizing them toward the achievement of Japan’s emission reduction targets; and (3) contributing to the achievement of the ultimate objective of the UNFCCC by promoting global actions for the reduction and removal of GHG emissions. The Ministry of Environment provides subsidies of up to 40 million yen for REDD+ projects to support initial project costs and the introduction of technologies (Source: Ministry of the Environment, “Guidebook on City-to-City Collaboration for the Realization of a Decarbonized Society” (2020), p.50, and URL Address <https://chubu.env.go.jp/content/900115661.pdf> (Access: 29 April 2025))

⁵⁰ F-REDD Project Completion Report (Term II) p.65.

	end, at least one REDD+ project in the northern part of Laos, adapting the PAREDD approach as a mitigation measure, is proposed to Government of Laos.	expand the PAREDD Approach” of Output 4 of F-REDD, “REDD+ readiness in Luang Prabang Province and Oudomxay Province is enhanced,” land use plans as well as forest management and livelihood improvement activities that referenced the PAREDD Approach were implemented in the two LENS2 target districts. ⁵¹
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Source: Prepared by the external evaluator

Table 4 Achievement of Overall Goal (F-REDD)

Overall Goal	Indicator	Actual
Sustainable forest management is promoted through full implementation of REDD+ and in coordination with the Forest Strategy	Indicator 1: REDD+ MRV periodically reported through the BTRs. ⁵²	Achievement status: achieved as planned. - This indicator was expected to be achieved by regularly submitting the REDD+ MRV report prepared by the Department of Forestry as an attachment to the BTR prepared by the Department of Climate Change of the Ministry of Natural Resources and Environment. Because the Ministry of Natural Resources and Environment ceased to be the implementing agency midway through the project period, it was decided in the ex-post evaluation to verify whether the REDD+ Technical Annex was prepared by the Department of Forestry as the national MRV results for this indicator. However, the detailed MRV template was only finalized by the UNFCCC Board in 2024, making it impossible to confirm the MRV preparation status at the time of ex-post evaluation. - Therefore, as an indicator nearly equivalent to MRV, the six northern provinces’ MMR⁵³ for the FCPF was verified. The first MMR for the six northern provinces was submitted by the Department of Forestry to the World Bank in November 2022, and the second MMR was submitted in August 2025. The capacity of the Department of Forestry staff to carry out MRV (MMR) has significantly improved under F-REDD2, compared to the F-REDD implementation period, confirming the effects of continuous technical cooperation.⁵⁴
	Indicator 2: SFM shows progress in line with the revised <i>FS2020</i> .	Achievement status: achieved as planned. The revised <i>FS2020</i> was approved by the Government of Lao P.D.R. as <i>FS2035</i> in May 2024. The project team interpreted the continued efforts to increase forest coverage rate in line with the targets outlined in <i>FS2035</i>’s “2.4 Targets and Expected Outcomes” as progress in

⁵¹ F-REDD Project Completion Report (Term II), pp. 67 and 76; answers to the questionnaire by and interviews with the consultant and the Luang Prabang Provincial Agriculture and Forestry Office.

⁵² The initial indicator was the BUR (Biennial Update Report), but it was changed to the Biennial Transparency Report (BTR) in accordance with the Paris Agreement.

⁵³ MMR is an abbreviation of Measurement, Monitoring, and Reporting. The submission of an Emission Reduction Monitoring Report detailing the measured annual average emission reductions and removals across six provinces was planned. The MRV of these emission reductions and removals is referred to as the MMR within the FCPF.

⁵⁴ Interview with F-REDD2 experts

		sustainable forest management. ⁵⁵ At the time of ex-post evaluation, it had been approved only recently, and progress based on specific information or data could not be confirmed. However, because the Department of Forestry is conducting monitoring according to the plan for the target year of 2035, it was judged that the target was achieved.
	Indicator 3: Luang Prabang and Oudomxay Provinces achieve 10 % reduction of emissions and 10% increase of removals (tCO2e) from their forest in 2025 against the baseline of 2015. ⁵⁶ (Supplementary Indicator) Forest Management in Luang Prabang and Oudomxay Provinces	Achievement status: could not be confirmed at the time of ex-post evaluation. As stated in “2.3 Constraints During the Evaluation Study,” data for this indicator are expected to be available by the end of 2025 and could not be confirmed by the time the ex-post evaluation report was prepared. Therefore, to confirm progress toward the Overall Goal of promoting sustainable forest management, qualitative information on forest management in the two target provinces was collected. < (Supplementary Indicator) Forest management in Luang Prabang and Oudomxay Provinces > • In the nine villages visited during the ex-post evaluation, ⁵⁷ the local population recognized the

⁵⁵ FS2035 sets as its Overall Goal the proper management and protection of forests, halting the destruction of forest resources while restoring, developing, and improving degraded forests. To achieve this overall goal, FS2035 establishes the following eight specific objectives: 1. Surveys and land allocation to secure and designate 70% of the national territory as forest. Protected forest land: 8.2 million hectares (35%), Conservation forest land: 4.7 million hectares (20%), Production forest land: 3.1 million hectares (13%), Afforestation land: 0.5 million hectares (2%). 2. Implement the following measures to increase forest coverage rate to 70% of the national territory: Manage and conserve existing forests (approximately 14.7 million hectares, 62% of the national territory); Regenerate and restore at least 1.3 million hectares of degraded forests to prevent forest destruction and degradation and appropriately maintain existing forest resources; Conduct afforestation on bare land and cultivate non-timber forest products. 3. Developing and upgrading the timber and non-timber forest products industry: Modernizing the production and processing of timber and non-timber forest products, improving product quality (for domestic use and export), strengthening supply chain management, and expanding markets. 4. Promoting forestry-related businesses: Advancing plantations, wood processing, ecotourism, carbon trading, etc. Improving the livelihoods of local communities through job creation and income growth, contributing to the national economy. 5. Relocation and Livelihood Improvement for Forest Dwellers: Facilitating the relocation of forest-dwelling communities to areas with greater income opportunities. Supporting livelihoods through commercial activities based on local potential. 6. Enhancing Forest and Forest Land Quality and Biodiversity Conservation: Preserving biodiversity. Protecting animal and plant habitats. Conserving soil and water resources. Maintaining and enhancing ecosystem services. Mitigating the impact of natural disasters. 7. Strengthening law enforcement and reducing greenhouse gas emissions: Strict compliance with forestry laws and enhanced law enforcement. CO₂ reduction target: Total 55 million tons. Reduction through preventing deforestation: 40 million tons. Absorption through regeneration and reforestation: 15 million tons. 8. Strengthening organizational, human resource, and technical foundations: Improving organizational structures and human resource capabilities in the forestry sector; establishing a technical foundation capable of implementing national policies; promoting domestic and foreign investment; advancing international and regional integration. (Source: Summarized by the external evaluator based on FS2035).

⁵⁶ This indicator of PDM was set to align with the baseline and target values in the FCPF Carbon Fund's Emission Reduction Program Plan (as of November 2015). The FCPF Carbon Fund covers the period 2019-2025 and targets six northern provinces, including Luang Prabang and Oudomxay Provinces.

⁵⁷ The villages visited during the field survey were selected in line with the following criteria, based on information provided by the Provincial Agriculture and Forestry Offices and F-REDD2 experts. (1) Results of livelihood improvement activities: sites where it could be confirmed that incomes had improved and that alternative livelihood options contributed to forest conservation. (2) Level of women's participation: sites where women actively participated in livelihood improvement activities and sites where they did not, enabling the assessment of project effects from a gender perspective. Regarding PAREDD, of the five target villages in

		boundaries between forests and agricultural land through the formulation of participatory land use plans and the installation of signboards and boundary poles indicating forest zoning. Since the completion of the project, no expansion of agricultural land was observed in any of the villages visited, and forest areas have either increased or been maintained. • The agriculture and forestry offices in both provinces are managing forests efficiently and effectively using PDMS. When slash-and-burn agriculture or illegal logging is detected on PDMS, it is verified through the district agriculture and forestry offices. Indeed, in Oudomxay Province, 29 instances of slash-and-burn agriculture were detected across 6 villages in 2023, but this decreased to 18 instances across 3 villages in 2024.⁵⁸ • Furthermore, results from the satellite data survey conducted for this ex-post evaluation indicate that protected areas in the two provinces⁵⁹ show a smaller trend of forest loss than surrounding areas. (See the column at the end of the report for details).
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Source: Prepared by the external evaluator



Photo 2: Signboard displaying the village land use plan installed in Phonkeo Village, Nan District, Luang Prabang Province under F-REDD. (Source: Photo taken by the external evaluator)



Photo 3: Boundary pole installed in the PP-PPT-TKS protected forest in Luang Prabang Province under F-REDD. The sign reads, "Moving or destroying the pole is prohibited. Violators will face legal action." (Source: Photo taken by the external evaluator)

Phonsay District, Luang Prabang Province, Houaykhing Village and Sakuan Village, and of the four target villages in Xiengngun District of the same province, Houaykhong Village and Houaykhot Village were visited, for a total of four villages. With regard to F-REDD, a total of five villages were visited: Xiengmuak Village in Luang Prabang District and Phonkeo Village in Nan District, Luang Prabang Province, and Houayhoum Village in Xay District, Napa Village and Piahouanam Village in Beng District, Oudomxay Province.

⁵⁸ Interview with Provincial Agriculture and Forest Office of Oudomxay

⁵⁹ Luang Prabang Province: Phou Pheung-Phou Pha Thoun-Tat Kuang Si National Protection Area (hereinafter referred to as "PP-PPT-TKS"). Oudomxay Province: Nam Beng National Protection Forest Area.

The two indicators for the Overall Goal of PAREDD were achieved. The PAREDD approach established through the project has been applied in northern Laos, such as in the World Bank's LENS2 and the GCF/GIZ's I-GFLL, and the Overall Goal "A forest degradation reduction system is applied in northern Laos" can be considered achieved. Regarding F-REDD, the achievement status of the indicators indicates that sustainable forest management has been promoted. Based on the above, it is judged that the project has mostly achieved its Overall Goal.

3.2.2.2 Other Positive and Negative Impacts

1) Impacts on the Environment

Regarding PAREDD, the classification of the environmental and social considerations category was not described in the ex-ante evaluation sheet. F-REDD was classified as Category C based on the Guidelines for Environmental and Social Considerations (April 2010), which entails almost no environmental or social impact, because it did not involve the construction of facilities. There was no environmental impact caused by the project.⁶⁰

2) Resettlement and Land Acquisition

This project did not involve any resettlement or land acquisition.⁶¹

3) Gender Equality/Marginalized People/Social Systems and Norms, People's Well-being and Human Rights

As a result of group interviews conducted in the nine villages surveyed,⁶² the following impacts were confirmed.⁶³

- In all nine villages surveyed, a reduction in the number of poor households through livelihood improvement activities implemented under the project was confirmed.⁶⁴ In introducing livelihood improvement activities, the project

⁶⁰ Answers to the questionnaire by the experts

⁶¹ Answers to the questionnaire by the experts

⁶² Regarding PAREDD, group interviews were conducted in the following 4 villages out of the 9 villages where pilot activities were implemented under the project: Luang Prabang Province: Phonsay District, Houaykhing Village (7 participants: 6 males, 1 female); Phonsay District, Sakuan Village (7 participants: 5 males, 2 females); Xiengngun District, Houaykhong Village (4 participants: 2 males, 2 females); Xiengngun District, Houay Kot Village (10 participants: 6 males, 4 females). For F-REDD, field surveys were conducted in the following 5 villages out of the 7 villages where pilot activities were implemented under the project: Luang Prabang Province, Nan District, Pon Keo Village: 8 participants (6 males, 2 females); Luang Prabang Province, Luang Prabang District, Shen Muak Village: 9 participants (4 males, 5 females); Hoi Hom Village, Sai District, Oudomxay Province: 2 males; Piahouanam Village, Ben District, Oudomxay Province: 9 individuals (8 males, 1 female); Napa Village, Ben District, Oudomxay Province: 7 individuals (5 males, 2 females).

⁶³ However, it should be noted that all 9 surveyed villages continue to receive support from other agencies, meaning the impact is not solely attributable to this project.

⁶⁴ According to the explanation of officials of Provincial Agriculture and Forest Office of Luang Prabang Province, households living in cramped dwellings, those without housing, and those without land for cultivation or farming are classified as poor households. These households lack access to financial resources, so gaining access to initial costs for livelihood improvement activities offers them the potential to enhance their livelihoods.

ensured that a certain proportion of participating households consisted of poor households. For example, in Houaykhong Village, Xiengngun District, Luang Prabang Province, there were four poor households at the time of project implementation, but this number had decreased to zero by the time of ex-post evaluation. These households participated in one of the livelihood improvement activities— rice paddy cultivation—and earned income by selling their harvest. With the income obtained from the activities, they built houses with thatched roofs or renovated them into brick houses and purchased household appliances (such as refrigerators and televisions) and motorcycles, confirming an improvement in their quality of life.

- Furthermore, in Phonkeo Village, Nan District, Luang Prabang Province, an F-REDD target site, 20 households participating in livelihood improvement activities earned profits by selling goats they raised. Selection of participating households prioritized poor households (five households) and households identified as potentially affected by boundary demarcation (15 households). These households used income from the activities to build new houses, renovate existing ones, and purchase more food.

Table 5 Summary of Survey Results on Livelihood Improvement

	Project	Site	Livelihood Improvement Activity Outcomes
1	PAREDD	Houaykhing Village, Phonsay District, Luang Prabang Province	The livestock raising (goats, pigs, and poultry) and fish farming that were implemented at the time of project implementation are ongoing. In some cases, the profits are distributed to poor households.
2	PAREDD	Sakuan Village, Phonsay District, Luang Prabang Province	Livestock raising (goats, pigs, and poultry) was implemented during the project implementation. As a result, households that were able to secure livelihoods no longer cut forests.
3	PAREDD	Houaykhong Village, Xiengngun District, Luang Prabang Province	• Rice paddy cultivation and the cultivation of high-demand vegetables and fruits (lettuce, coriander, corn, and strawberries) are carried out in areas designated as agricultural land. • At the time of project implementation, there were four poor households; however, at the time of ex-post evaluation, there were none. These households participated in wet-rice cultivation, which is one of the livelihood improvement activities, and earned income by selling the harvest. Using the income obtained from these activities, they built houses with thatched roofs or renovated them into brick houses and purchased electrical appliances (refrigerators and televisions) and motorbikes, confirming an improvement in their quality of life.

4	PAREDD	Houaykhot Village, Xiengngun District, Luang Prabang Province	- The number of households increased from 45 at the time of project implementation to 65 at the time of ex-post evaluation. The number of poor households decreased from six to two. - Livestock (goats, pigs, cattle, poultry). Livestock raising is difficult in terms of feeding, but participants learned by observing other sites. If marketing and sales can be conducted, livelihood improvement activities can be sustained. - The fried banana activity carried out by a women's group with the participation of 10 households during the implementation of PAREDD was continued by two households on an individual basis at the time of ex-post evaluation. The reason for the shift to individual-based activities was that repayment of the seed money⁶⁵ was difficult; therefore, group activities were discontinued, and the activity has been continued in a form that can be completed within the household, whereby bananas are harvested, processed, and sold at home.
5	F-REDD	Phonkeo Village, Nan District Village, Luang Prabang Province	The 20 households that participated in the livelihood improvement activities earned profits through the sale of goats they raised. In the selection of participating households, priority was given to poor households (five households) and households affected at the time of boundary identification (15 households). The profits obtained were used for the construction of new houses and for house renovation.
6	F-REDD	Xiengmuak Village, Luang Prabang District, Luang Prabang Province	- Livestock raising and vegetable cultivation that were initiated by utilizing the revolving fund have continued. The number of households participating increased from six to fifteen for livestock and from three to nine for vegetables. Livestock raising was discontinued in 2023 due to incidents of livestock theft and the high cost of feed. Profits obtained from the livelihood improvement activities are sometimes donated to poor households. - Vegetables cultivated include lettuce, coriander, corn, pumpkin, and mint. Households that obtained profits are reinvesting them in agriculture.
7	F-REDD	Houayhoum Village, Xay District, Oudomxay Province	Cardamom cultivation had been carried out since before project implementation; however, under F-REDD, step-by-step methods such as land preparation and weeding techniques were improved. During project implementation, there were 12 poor households, but this number has decreased to six. Of the 12 households that participated, four came to earn income through cardamom cultivation.
8	F-REDD	Piahouanam Village, Ben District, Oudomxay Province	57 households participated in cardamom cultivation, and the number of successful and unsuccessful cases was approximately half and half. In successful cases, income has been earned through sales. The unsuccessful cases occurred due to reasons such as cultivation sites being far from water sources and excessive rainfall, which caused the crops to stop growing partway through cultivation.

⁶⁵ Seed money refers to initial funds provided to resident organizations, producer groups, etc., to secure working capital at the start of activities, enabling the sustainable operation of income-generating activities and livelihood improvement initiatives. In PAREDD, seed money was provided as interest-free loans, and by repeatedly carrying out repayment and re-lending, it played a role in maintaining and expanding the scale of the revolving fund and circulating funds within the community (revolving).

9	F-REDD	Napa Village, Ben District, Oudomxay Province	- The number of poor households decreased from 17 at the time of project implementation to seven in 2024. The reason given was that households shifted from rotational slash-and-burn cultivation to livelihood activities that can be carried out in the same location, such as livestock raising, fruit tree cultivation, and rice paddy cultivation.⁶⁶ - As livelihood improvement activities, cardamom cultivation, cotton cultivation, and aquaculture were implemented. Cardamom cultivation did not grow and was not successful, but the reason is unknown.
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Source: Prepared by the external evaluator based on field survey results



Photo 4: Pigs raised through livelihood improvement activities (Source: photo taken by the external evaluator)



Photo 5: Mint cultivated through livelihood improvement activities (Source: photo taken by the external evaluator)



Photo 6: Fried bananas, introduced through PAREDD (Source: photo taken by the external evaluator)

Through the implementation of this project, the establishment of a system for reducing deforestation and forest degradation and the strengthening of the capacity of REDD+-related institutions and human resources for sustainable forest management, which were set as the Project Purpose, were mostly achieved. In addition, regarding the Overall Goal, through the development of forest policies and forest resource information and the promotion of field-level REDD+ activities, the capacity of REDD+-related institutions and human resources in the central and local governments of Lao P.D.R. for sustainable forest management was strengthened, and effects such as the receipt of results-based payments from carbon dioxide emission reductions after project completion were observed; therefore, it can be said that sustainable forest management through the implementation of REDD+ in Lao P.D.R. was promoted to a certain extent. This project has mostly achieved the Project Purpose and the Overall Goal. Therefore, effectiveness and impacts of the project are high.

3.3 Efficiency (Rating: ③)

3.3.1 Inputs

Inputs for the project are as follows.

⁶⁶ While F-REDD supported cardamom cultivation, cotton and aquaculture were likely supported by the Asian Development Bank (ADB)'s concurrently implemented rural development project, though residents did not distinguish between the projects. In target areas within Xay and Ben Districts, coordination occurred between F-REDD (supporting forest management and cardamom planting) and ADB (supporting rural development) for villages supported by ADB, aiming for synergistic effects. (Source: interview with experts)

Table 6 Planned and Actual Inputs (PAREDD)

Inputs	Plan	Actual
(1) Experts	- Three to four Long-Term experts: Chief Advisor, Coordinator/Extension Promotion, Community Development, Forest Resource Management, etc. (P/M not stated) - Short-Term experts (fields, number of experts, or P/M not stated)	- Seven Long-Term experts (Chief Advisor (2), Forest Resource Management (2), Rural Development (1), Extension Promotion/Project Management (1), Coordinator/Livelihood Improvement (1) (243.8 P/M) - Four Short-Term experts (Forest Resource Information, Deforestation Reduction System, Agricultural Improvement, Forest Carbon Monitoring) (3.3 P/M) - Short-Term experts team related to Output 4: a cumulative total of 15 experts, 17 P/M
(2) Trainees received	Approximately two persons per year	17 persons
(3) Equipment	A plotter (large-format printer), satellite image analysis software, etc.	Vehicles, motorcycles, satellite imagery, computers, copiers, etc.
(4) Facility	Not specified	Village road and bridge improvement (Houaykhing Village), road improvement (Sopchia-Houayam section), project field office improvement
(5) Local Operational Cost	Partial contribution to project activity costs	125 million yen
Japanese Side Total Project Cost	420 million yen	575 million yen
Lao P.D.R. Side Total Project Cost	Not specified	n.a.

Source: The plan is based on the ex-ante evaluation sheet, and the actual inputs are based on documents provided by JICA.

P/M stands for person-month.

Table 7 Planned and Actual Inputs (F-REDD)

Inputs	Plan	Actual
(1) Experts	Chief Advisor, Forest Policy, Forest Information Systems, Remote Sensing, Forest Inventory, Database Management, etc. (number of personnel and P/M not stated)	A cumulative total of 17 persons (185.57 P/M)
(2) Trainee Received	Several per year	16 persons
(3) Equipment	Plotters, satellite image analysis software, etc.	Plotters, satellite image analysis software, etc.
(4) Local Operational Cost	Partial contribution to project activity expenses	270 million yen
Japanese Side Total Project Cost	821 million yen	Approximately 939 million yen
Lao P.D.R. Side Total Project Cost	Not specified	Approximately 23 million yen

Source: The plan is based on the ex-ante evaluation sheet, and the actual inputs are based on the F-REDD Project Completion Report (Term II), pp.3–10.

3.3.1.1 Elements of Inputs

Regarding the quality and quantity of inputs from the Japanese side, no particular problems were identified. Multiple experts with extensive experience working in Lao P.D.R. were assigned, and there was a high level of trust in the JICA experts from the implementing agencies and other donors, enabling coordination and collaboration as described under External Coherence.

Regarding inputs from the Lao side as well, no particular problems were identified. For F-REDD, although there was a change in the implementing agency due to the reorganization of Lao ministries, this did not hinder the implementation of project activities. In particular, counterparts gradually demonstrated ownership of the project activities.

3.3.1.2 Project Cost

As shown in Table 8, the project cost of this project amounted to 1,514 million yen, against the planned amount of 1,237 million yen, slightly exceeding the plan (122% of the planned amount). The comparison between the planned and actual project costs was conducted in accordance with JICA's Reference for External Ex-Post Evaluation⁶⁷; as a result, for F-REDD, in light of the project objective—"strengthening the capacity of REDD+-related institutions and human resources in the central and local governments of Lao P.D.R. by clarifying strategies for the utilization of REDD+ and developing forest resource information, thereby contributing to promotion of sustainable forest management through the full implementation of REDD+"—the planned project cost was defined as the amount including additional tasks whose changes were deemed appropriate.

Table 8 Project Cost

Unit: million yen			
	Planned Amount	Actual Amount	Ratio to Plan
PAREDD	420	575	137%
F-REDD	817 ^{Note}	939	115%
Total	1,237	1,514	122%

Source: Ex-ante evaluation sheet, documents provided by JICA

Note: Total amount consisting of the planned amount at the time of ex-ante evaluation (700 million yen) plus (1) additional tasks associated with support for participation in the FCPF Carbon Fund (35 million yen), (2) additional tasks at the time of second revision of the R/D (49 million yen), and (3) additional tasks at the time of third revision of the R/D (33 million yen).

⁶⁷ The External Ex-Post Evaluation Reference states that, when changes in the project scope result in increases or decreases in the project period or project cost, the evaluation should not be conducted simply based on the increased or decreased actual figures. If project components have been changed, considering the status of obtaining agreement on such changes between the recipient government and JICA, consistency with the project objectives, and other relevant factors, and where the appropriateness of the changes is recognized, a comparison with the actual results should be made using the post-change figures as the planned values.

The main additional tasks are as follows.

(1) Support for preparation for participation in the FCPF Carbon Fund⁶⁸

For Lao P.D.R. to receive results-based payments under REDD+, it first needed to be approved as a country through the UNFCCC technical assessment. The UNFCCC technical assessment is a formal review process in which experts verify whether the Forest Reference Emission Level/Forest Reference Level and REDD+ results reports comply with international standards and confirm transparency, consistency, and accuracy; however, Lao P.D.R., which had no prior experience, required technical support from donors. Therefore, as a change to the planned values, under Output 2, “Emission reductions and removals resulting from the implementation of the REDD+ activities are quantified at the national scale by using the NFMS,” activities such as support for conducting the national inventory and support for preparing the Emission Reductions Program Document and REDD+ readiness reports were added for the Government of Lao P.D.R. to pass the technical assessment. As a result, following the signing of the Emission Reductions Payment Agreement in December 2020, covering six northern provinces as the target area, the Emission Reduction Program was implemented. This change contributed to the results-based payment received by the Government of Lao P.D.R. from the FCPF Carbon Fund in July 2024, and the change was judged to be appropriate.

(2) Addition of tasks at the time of second amendment of the R/D (September 2020)⁶⁹

As a change to the planned values, tasks such as “Activity 2.1.7 Implementation of the NFMS implementation plan” and “Activity 2.1.8 Extend the PDMS to the provinces covered by the FCPF Carbon Fund Emission Reduction Program in cooperation with the GCF/GIZ and other projects” were added as activities under Output 2.⁷⁰ Regarding the NFMS, as already described in “3.2.1.1 Achievement of Project Purpose,” the NFMS Roadmap was submitted to the UNFCCC through the Ministry of Natural Resources and Environment and was finalized following a technical assessment. Lao P.D.R. completed the UNFCCC technical assessment in June 2021. The completion of the technical assessment marked an important milestone, for it showed that the national MRV framework and the NFMS comply with international standards, and the change was judged as appropriate. In addition, regarding the PDMS, as described in “3.1.2.3 External Coherence,” forest monitoring in the six northern target provinces under the I-GFLL, in cooperation with GIZ, was strengthened and contributed to the results-based payment

⁶⁸ Second amendment to the consultant contract (dated 7 September 2018) (increase of 35 million yen)

⁶⁹ Additional tasks associated with the 12-month extension of the project period at the time of second amendment of the R/D (July 2020) (increase of 49 million yen) (Source: documents provided by JICA)

⁷⁰ In F-REDD, two experts were based in Lao P.D.R., and even during the COVID-19 pandemic, project activities were continued with these experts playing a central role.

from the FCPF Carbon Fund in July 2024; therefore, the change was judged as appropriate.

(3) Main additional tasks at the time of third amendment of the R/D (October 2021)⁷¹

As a change to the planned values, under Output 1, “Capacity of the central government on policy development, implementation and sector coordination is enhanced,” and as part of “support for the formulation of forest-related laws and policies,” “support for the formulation of a new ministerial regulation concerning the promotion and management of private-sector REDD+ projects or forest carbon trading activities” was added. This support was intended to reflect, in Lao ministerial regulations, an analysis of the provisions concerning the market for emissions trading under the UNFCCC mechanism pursuant to Article 6.4 of the Paris Agreement, which was expected at COP26 in November 2021. In addition, support for applications for REDD+ results-based payments from the GCF and support for MRV implementation under the FCPF Carbon Fund continued from the additional tasks introduced at the time of second amendment of the R/D revision. As a result, these changes contributed to the results-based payment from the FCPF Carbon Fund in July 2024 and to the approval, in October 2025, of the proposal for REDD+ results-based payments by the GCF; therefore, the changes were judged as appropriate.

Other major reasons for differences between the planned and actual project costs include, regarding PAREDD, increases due to additional costs for the dispatch of experts and overseas strengthened project costs associated with the extension of the project period as well as increases resulting from contract changes for Output 4, “Validation and registration of the project on REDD plus through participatory land and forest management for avoiding deforestation in Lao PDR”. Because these increases occurred mainly due to project extensions caused by delays in activities, they were assessed as increases in the actual project cost.

3.3.1.3 Project Period

The planned project period comprised PAREDD (August 2009–August 2014 (60 months)) and F-REDD (December 2014–October 2020 (70 months)), for a total of 130 months, whereas the actual period comprised PAREDD (August 2009–September 2015 (73 months)) and F-REDD (December 2014–January 2022 (86 months)), for a total of 159 months (122% of the planned period). The difference between the planned and actual periods was mainly due to the extension of the project period for PAREDD as a result of

⁷¹ Additional tasks undertaken in conjunction with the three-month extension under the third revision of the R/D (September 2021), with an increase of 33 million yen (Source: documents provided by JICA)

delays in verifying the effectiveness of the PAREDD approach in reducing deforestation and forest degradation and in initiating livelihood improvement activities in Phonsay District. Regarding F-REDD, due to delays in activities caused by restrictions on expert travel and domestic movement in Lao P.D.R. resulting from the COVID-19 pandemic and to implement the additional tasks described in “3.3.1.2 Project Cost,” the project period was extended by 12 months at the time of second amendment of the R/D (July 2020) and by three months at the time of third amendment of the R/D (September 2021). However, because project activities were continued through coordination and support centered on Japanese experts residing in Lao P.D.R., via email and online meetings with counterparts, local staff, local consultants, and others, the extension periods were treated as actual implementation periods.

Table 9 Project Period

	Plan	Actual	Ratio to Plan
PAREDD	August 2009-August 2014 (60 months)	August 2009–September 2015 (Extension period: September 2014–September 2015) (73 months)	122%
F-REDD	December 2014-October 2020 (70 months)	December 2014-January 2022 (Extension period: October 2020–January 2022) (86 months)	123%
Total	130 months	159 months	122%

Source: Ex-ante evaluation sheet documents provided by JICA.

Based on the above, the project cost amounted to 1,514 million yen, against the planned 1,237 million yen, slightly exceeding the plan (122% of the plan), and the project period amounted to 159 months against the planned 130 months, also slightly exceeding the plan (122% of the plan). Therefore, the efficiency of the project is high.

3.4 Sustainability (Rating:②)

3.4.1 Policy and System

The Government of Lao P.D.R. places emphasis on sustainable forest management and REDD+ for increasing forest cover rate under its development plan and forest sector policies, and thus the policy sustainability necessary for continuity of the effects the project is ensured. In the *Vision 2030*, the *9th NSEDP (2021-2025)*, and the *National Green Growth Strategy*, the Government of Lao P.D.R. positions environmentally friendly and sustainable economic growth, promotion of the forest sector, and responses to climate change and natural disasters as key policies and continues policies aimed at sustainable forest management and the improvement of local livelihoods. The Ministry of Agriculture and Forestry adopted the *National REDD+ Strategy* in May 2021 and set forth a policy to strategically promote

REDD+ in Lao P.D.R. Furthermore, in *FS2035*, approved in 2024, the Government of Lao P.D.R. sets forth a vision to restore the forest coverage rate to 70% by 2035 and to sustainably manage and develop the restored forests, thereby conserving biodiversity, protecting watersheds, improving environmental quality, and mitigating the impacts of global warming.

3.4.2 Institutional/Organizational Aspect

At the completion of F-REDD, it was pointed out that, due to the organizational reorganization of the forest sector, fewer staff were assigned to handle a larger volume of work, highlighting the need to strengthen organizational structures and staff capacity and to improve operational efficiency. At the time of ex-post evaluation, the shortage of personnel in administrative agencies remains unchanged, and this continues to pose an organizational challenge for implementing agencies of Lao P.D.R. in carrying out REDD+-related tasks without relying on donors' support.

In June 2025, the Ministry of Agriculture and Forestry was merged with the Ministry of Natural Resources and Environment, to form the Ministry of Agriculture and Environment. Within the Department of Forestry, 11 divisions have been established.⁷² In the Department of Forestry, the Planning and Cooperation Division is responsible for managing activity plans and coordinating with donors. The Forest Survey and Forest Fire Prevention Division surveys and monitors changes in forest resources and manages nationwide forest resource information, and the REDD+ Division promotes climate change-related activities in cooperation with the Department of Environment, which is responsible for REDD+-related activities.

The Government of Lao P.D.R. is said to have a higher proportion of government officers relative to its population compared with other ASEAN countries, and it has been working to merge ministerial and sub-ministerial organizations with overlapping functions and to reduce the number of civil servants. Through the ministerial reorganization in 2017, the Forest Resources Management Department of the Ministry of Natural Resources and Environment was integrated into the Department of Forestry; the REDD+ Division of the Forest Resources Management Department was merged into the REDD+ Division of the Department of Forestry; and the Protection Forest Management Division and the Conservation Forest Management Division were established as divisions responsible for the management of protection forests and conservation forests. Through these reorganizations, REDD+ in Lao P.D.R. was centralized, and an institutional framework for

⁷² Under the high-level leaders (Director General and Deputy Director General), the following divisions are in place: the Administrative Division; the Planning and Cooperation Division; the Production Forest Management Division; the Village Forestry and Non-Timber Forest Product Management Division; the Protection Forest Management Division; the Conservation Forest Management Division; the Wildlife and Aquatic Animals Management Division; the Village Forest Management Division; the REDD+ Division; the Forest Inventory and Preventing Forest Fire Division; and the Forestry Training Center.

promoting REDD+ was established. In 2021, within the Department of Forestry, the Plantation Promotion Division was merged into the Production Forest Division. The number of government officers at the Department of Forestry has been on a continuous decline, decreasing from 186 in 2021 to 172 as of February 2025, and further to 154 following the ministerial reorganization in June 2025. According to responses to the questionnaire and interviews conducted with the Department of Forestry, it is difficult to increase the number of officers due to a series of organizational mergers and consolidations as well as insufficient government budget. Consequently, the situation in which government officers are required to carry out a wide range of tasks with limited personnel has continued even at the time of the ex-post evaluation.

At the provincial level, taking the two F-REDD pilot provinces as examples, both the Provincial Agriculture and Forestry Office of Luang Prabang Province and that of Oudomxay Province do not show major shortages in personnel for carrying out their duties.⁷³ As of the ex-post evaluation, 135 staff members were assigned to the Luang Prabang Provincial Agriculture and Forestry Office and 119 staff members to the Oudomxay Provincial Agriculture and Forestry Office. The Oudomxay Provincial Agriculture and Forestry Office noted a slight shortage of personnel, stating that while two staff members are assigned to check the PDMS and two staff members to conduct field follow-up, four staff members are needed for field follow-up. In practice, when illegal logging or slash-and-burn cultivation is detected through the PDMS, the provincial office contacts the District Agriculture and Forestry Office, which then visits the relevant site for verification. Thus, it was confirmed that the use of the PDMS enables the detection of illegal logging and slash-and-burn cultivation at the system level and that coordination with district and village stakeholders helps compensate for the limited number of staff at the provincial level. It was also confirmed that local population is aware of this flow of information, and that the introduction of the PDMS has contributed to raising awareness among local population.

While the effectiveness of the PDMS has thus been recognized, the Luang Prabang Provincial Agriculture and Forestry Office pointed out the need to expand the area covered by the PDMS. Through the formulation of village-level land use plans with community participation and land zoning (including the identification of land categories using GPS and the installation of boundary markers), the PDMS enables cross-checking between system-based monitoring results and actual land use classifications. In Luang Prabang Province, five out of 12 districts, and four out of seven districts in Oudomxay Province, do not meet these necessary conditions. Ideally, land use plans should be formulated through

⁷³ Answers to the questionnaire by the Luang Prabang Provincial Agriculture and Forestry Office and the Oudomxay Provincial Agriculture and Forestry Office

community participation and land use should be monitored based on zoning agreed upon by residents and registered using GPS; however, due to constraints in personnel and budget on the Lao side, it is expected that expanding the area covered by the PDMS will still require time.

3.4.3 Technical Aspect

Although the knowledge and operational capacity of the Department of Forestry staff regarding REDD+ and MRV have steadily improved through support from F-REDD and other donors, it remains difficult for the Lao side to independently carry out REDD+-related tasks, which are continuously evolving in line with international frameworks and trends. The need for continued donor technical support therefore remains a challenge in terms of technical sustainability.

Regarding forest management at the national and provincial levels, in May 2024 the Ministry of Agriculture and Forestry approved the PDMS as the official national forest monitoring tool. It is currently being operated in 16 of Lao P.D.R.'s 18 provinces. As described in "3.4.2 Institutional/Organizational Aspect," the use of the PDMS has enabled the Agriculture and Forestry Offices to efficiently detect illegal logging and slash-and-burn cultivation, and at the national level, where information from each province is compiled, forest management has also become more efficient. In fact, during field visits to nine villages in Luang Prabang Province and Oudomxay Province at the time of ex-post evaluation, it was confirmed that regular monitoring was being conducted, with village land management committees periodically monitoring forests and reporting to the District Agriculture and Forestry Offices, which in turn report to the Provincial Agriculture and Forestry Offices, and the District Agriculture and Forestry Offices also conducting monitoring visits to villages.

As part of the NFMS, the level of understanding and the actual work carried out by the Department of Forestry staff in preparing forest classification maps and the National Forest Inventory have visibly improved under F-REDD2, compared to the period of F-REDD implementation, and accordingly, the degree of technical support provided by JICA experts has been decreasing under F-REDD2.⁷⁴ In July 2024, Lao P.D.R. received its first results-based payment as a participating country of the FCPF Carbon Fund; furthermore, in October 2025, a proposal for REDD+ results-based payments from the GCF was approved. Through these developments, officials of the Government of Lao P.D.R., centered on the Department of Forestry, have strengthened their sense of ownership as a REDD+ implementing country and have come to recognize that REDD+ brings various benefits to the forest sector, including international recognition and financial resources.

⁷⁴ Interview with the F-REDD2 experts

Although the results of many years of technical support are thus becoming evident, there remain aspects in which donor experts continue to take the lead, such as the operation of the National Forest Inventory and the NFMS, and further technical capacity strengthening is required for the Lao side to be able to implement these activities independently.

3.4.4 Financial Aspect

Although donor support for Lao P.D.R.'s forest sector continues and there is some prospect of securing budgets through REDD+ results-based payments, the Government of Lao P.D.R. has limited own-source funding that can be allocated to forest management. As a result, for instance, it is difficult to address even minor maintenance needs, such as the loss of boundary poles and the repainting of peeling paint on boundary poles, as described below. The heavy dependence of the Lao forest sector on donor funding remains a challenge in terms of financial sustainability.

There are no delays in the payment of salaries and allowances or in travel and meeting expenses, allocated by the Ministry of Finance to the Department of Forestry of the Ministry of Agriculture and Forestry.⁷⁵ The Forest Protection Fund⁷⁶ is financed by revenues from field-level forest management and inspections; however, these funds are limited due to the decline in natural forest logging volumes. This situation has remained unchanged from the time of project implementation through the ex-post evaluation. Government budget resources alone are insufficient to implement forest sector activities, and forest sector initiatives in Lao P.D.R. are largely carried out through donor-funded projects. Donor support including JICA has increasingly focused on achieving REDD+ results-based payments.

In 2024, the Government of Lao P.D.R. received USD 16 million from the FCPF Carbon Fund, and furthermore, a proposal for USD 61 million in REDD+ results-based payments from the GCF was approved.⁷⁷ Results-based payments from the FCPF Carbon Fund and the GCF make it possible to reinvest in forest conservation, livelihood improvement for local population, and other activities, thereby generating further REDD+ revenues. For the Provincial Agriculture and Forestry Offices, budgets necessary for routine forest

⁷⁵ Data were not provided by the Ministry of Agriculture and Forestry, and therefore the specific amounts could not be confirmed.

⁷⁶ Article 131 of the Lao Forestry Law (as amended in 2019) stipulates that “revenues from the trade of timber and non-timber forest products, the use of forests and forestland, and other related sources shall be allocated to the Forest Protection Fund and expended for the management, protection, development, utilization, and inspection of forestry and forestland.” It establishes a mechanism whereby revenues generated from forestry activities and forestland management (such as forest product transaction taxes, permit fees, and forest use fees, etc.) are collected and then allocated and managed through the Forest Protection Fund.

⁷⁷ The proposal entitled “REDD+ Results-Based Payments for the Lao People’s Democratic Republic for the 2015–2018 Results Period – Governance, Forest Landscape, and Livelihoods Project in Southern Lao P.D.R.” which JICA submitted to the GCF in cooperation with the Government of Lao P.D.R. was approved at the 43rd meeting of the GCF Board on October 29, 2025. URL Address https://www.jica.go.jp/information/press/2025/20251029_13.html (Access: 17 November 2025)

monitoring and monitoring of REDD+ activities have been secured.⁷⁸ Although budgets for day-to-day operations are in place, several challenges are also observed. Under F-REDD, boundary poles were installed in accordance with land zoning; however, during field visits conducted at the time of ex-post evaluation, the loss of boundary poles or peeling paint was confirmed in four of the five villages visited. These issues were caused by residents removing boundary poles or by the removal during road construction. There is no Government of Lao P.D.R. budget available for reinstallation or repair, and it was reported that without the allocation of donor funds, it would be difficult to address these issues.⁷⁹

3.4.5 Environmental and Social Aspect

No negative impacts were observed in terms of environmental and social aspect.

3.4.6 Preventative Measures to Risks

No particular risks were anticipated at the planning stage, and no negative impacts occurred.

In light of the above, although it can be said that policy sustainability for sustaining the effects generated by this project is ensured, some issues have been observed in terms of the institutional/organizational, technical, and financial aspects. Although the implementing agency develops a concrete transition plan to address these aspects, they are not expected to be improved/resolved within a short period. Therefore, sustainability of the project effects is moderately low.

4. Conclusion, Lessons Learned and Recommendations

4.1 Conclusion

PAREDD was implemented to establish a system for reducing deforestation and forest degradation, thereby contributing to the application of such a system in northern Lao P.D.R. F-REDD was implemented to strengthen the capacity of institutions and human resources involved in REDD+ to promote sustainable forest management, thereby contributing to the promotion of sustainable forest management in Lao P.D.R.

From the commencement to the completion of both projects, the project was consistent with the development plan and needs of the Government of Lao P.D.R. The project plans and approaches were appropriate and aligned with Japan's ODA policy at the time of planning. Regarding internal coherence, synergies were generated between this project and other

⁷⁸ Answers to questionnaires from the Provincial Agriculture and Forestry Offices of Luang Prabang Province and Oudomxay Province

⁷⁹ Interviews with the Provincial Agriculture and Forestry Offices of Luang Prabang Province and Oudomxay Province

JICA-supported projects, including the reflection of pilot activities' results into policies and the verification of the effectiveness of approaches to reduce deforestation. In terms of external coherence, high synergies were achieved through collaboration with other donors in promoting REDD+. Therefore, relevance and coherence are very high. As a result of the implementation of the project, the Project Purpose—namely, the establishment of systems to reduce deforestation and forest degradation, and the strengthening of the capacity of institutions and human resources responsible for REDD+ in sustainable forest management—were mostly achieved. Furthermore, the Overall Goal of promoting sustainable forest management in Lao P.D.R. through the implementation of REDD+ was achieved to a certain extent. Therefore, effectiveness and impacts of the project are high. Both the project cost and the project period slightly exceeded the plan. Therefore, efficiency of the project is high. Regarding sustainability, sustainability is judged to be secured in the policy aspect. However, some issues have been observed in terms of the institutional/organizational, technical and financial aspects and they are not expected to be improved/resolved within a short period. Therefore, sustainability of the project effects is moderately low. In light of the above, this project is evaluated to be satisfactory.

4.2 Recommendations

4.2.1 Recommendations to the Implementing Agency

(1) Recommendation to the Department of Forestry, Ministry of Agriculture and Forestry

The PDMS has been recognized as an effective tool for efficiently detecting land use. On the other hand, the introduction process—such as village-level land use planning and zoning—requires time. Given the limited budget of the Government of Lao P.D.R., it is desirable that the Department of Forestry of the Ministry of Agriculture and Forestry utilize donor funds and funds obtained through REDD+ results-based payments to expand the PDMS coverage area at the district level, thereby expanding the number of target districts. Furthermore, although capacities for conducting surveys and tasks—such as the National Forest Inventory, operation of the NFMS, and the preparation and submission of Forest Reference Emission Levels/Forest Reference Levels—have steadily improved, overall planning, implementation management, and analytical work are still led by donor experts and subcontractors. Going forward, continuous capacity strengthening is desirable so that the Lao side can independently carry out the entire series of tasks.

(2) Recommendations to the Provincial Agriculture and Forestry Offices of Luang Prabang Province and Oudomxay Province

Regarding the loss of boundary markers and peeling paint, in order to maintain the current condition in which forests are being conserved, it is desirable to seek funding

sources—such as donor budgets where donors providing support can be approached through ongoing projects or provincial or district budgets where donor support is unavailable—and to reinstall boundary markers and repaint markings. In addition, to enable maintenance of boundary poles at the community level, it is desirable to establish regular village-level monitoring and penalties in the event of loss and to take measures to prevent recurrence.

4.2.2 Recommendations to JICA

Regarding the expansion of the PDMS at the district level, it is desirable for JICA to examine possible approaches through opportunities such as the Forest Sub-Sector Working Group, for which JICA serves as a co-chair.

4.3 Lessons Learned

Effective collaboration with other projects and other donors

In this project, many good practices of collaboration were confirmed—among JICA's other projects in the case of PAREDD, and with other donors in the case of F-REDD. In particular, regarding F-REDD, activities implemented in collaboration with the World Bank and GIZ were flexibly incorporated into the PDM activities in line with project progress. Through such collaboration, outcomes such as the expansion of the PAREDD approach and the nationwide rollout of the PDMS that could not have been achieved by a single project alone were realized. The background to the establishment of such collaboration lies in the fact that, over many years, the JICA Lao P.D.R. Office has served as a co-chair of the Forest Sub-Sector Working Group, while simultaneously implementing multiple activities such as policy support, forest information development, and field-level activities for reducing deforestation, and has built extensive networks through these efforts. According to F-REDD experts, through close day-to-day communication, the needs of each donor were naturally understood, and an atmosphere conducive collaboration was fostered. In highly technical fields that require extensive technical support, such as REDD+, it is desirable to maintain close communication while clearly specifying, in official documents such as the PDM, the names of collaborating organizations and their activities and to consciously plan the content of collaboration and expected synergy effects from the planning stage.

5. Non-Score Criteria

5.1 Performance

5.1.1 Objective Perspective

For more than 20 years, JICA has provided support in two parallel tracks: central-level forest administration and institutional development in Lao P.D.R., including central-level

REDD+ initiatives, and the implementation of field-level REDD+ activities at the local level. In addition, JICA has served as co-chair of the Forest Sub-Sector Working Group and has played an important role as a lead donor in the forest sector. As a result, contributions such as the achievement of REDD+ results-based payments can be regarded as particularly noteworthy.

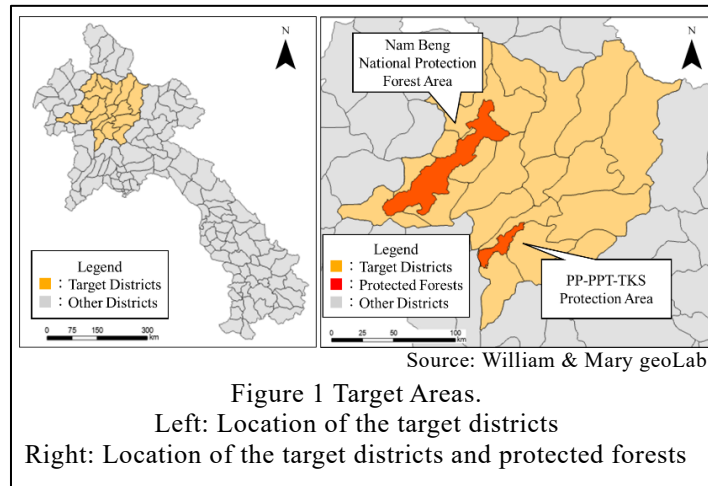
5.2 Additionality

None.

Column: Forest Change Analysis

To evaluate the effectiveness of the project, we conducted the ex-post evaluation by analyzing forest changes in the project's target areas using baseline satellite data from 2015 and satellite data from 2024. The results showed that the forest loss rate—calculated as forest loss per 1,000 km²—within protected forests was lower than the overall average of the target areas, indicating that the projects have contributed to curbing forest loss.

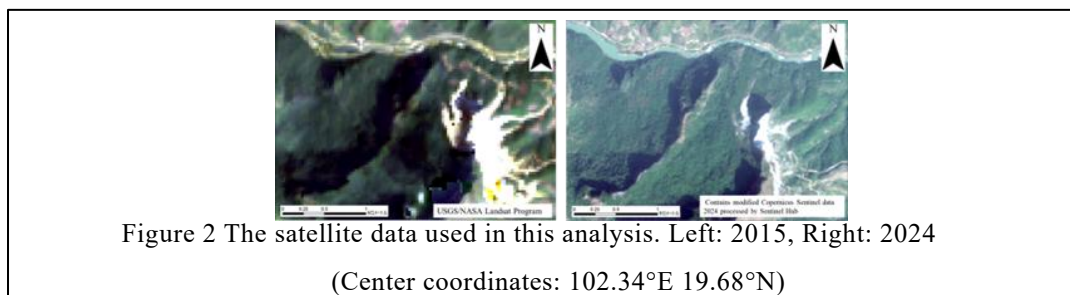
For the evaluation analysis, Luang Prabang Province and Oudomxay Province, which were the target provinces for 'PAREDD' and 'F-REDD', were selected as the target areas. The analysis was conducted separately for 'PAREDD' and 'F-REDD' project target areas: the PP-PPT-TKS Protected Area and the Nam Beng National Protected Forest. The positional relationships among the target areas are shown in Fig. 1.



For the analysis, optical satellite data, Landsat 8 from 2015 and Sentinel-2 from 2024, were used. The data collection period was the dry season (January to March), during which satellite images with minimal cloud cover were collected. The satellite data used in this analysis are shown in Fig. 2.

In this analysis, the baseline year was set as 2015 and the comparison year as 2024, and changes in forest cover in protection forests and the target districts between these two periods were quantitatively assessed. The specific methodology is described below.

To analyze the forest gain and loss, Normalized Difference Vegetation Index (NDVI) was calculated from the satellite data from 2015 and 2024. NDVI, an indicator of vegetation activity, is an effective tool for vegetation analysis between different sensors and different periods. The results of NDVI calculation are visualized in Fig. 3.



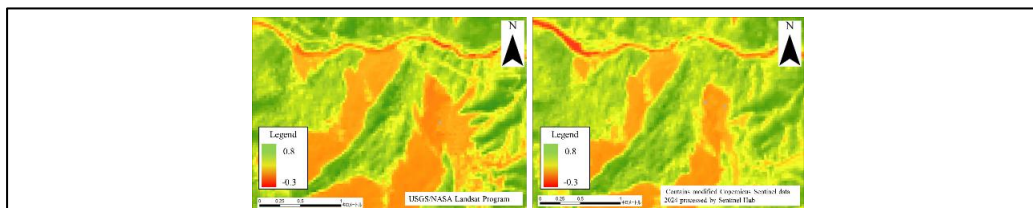


Figure 3 Images of NDVI Values. Left: NDVI from 2015, Right: NDVI from 2024
(Center coordinates: 102.34°E 19.68°N)

While NDVI reflects the amount of vegetation, it does not distinguish forest from other types of vegetation. Therefore, changes in NDVI values do not necessarily correspond to changes in forest cover. To assess forest cover change, we applied threshold-based approaches to delineate forested areas. The initial step involved classifying land cover in the target areas by supervised classification using the data from the Laos-NFMS as reference. The classification was conducted to ensure the error in the area ratio, compared to the reference data, remained within 5%, and the land cover was classified into 6 categories: forest land, grassland, cropland, wetlands, settlements, and other land. Subsequently, NDVI values from 2015 was compared with the land cover classification results, and NDVI values of pixels confidently located in forest areas were obtained as samples. It should be noted that as data from 2024 were not available on Laos-NFMS, the threshold was determined exclusively based on data from 2015. By analyzing the distribution of the sampled NDVI values, a threshold value of 0.19 was set as the minimum value observed among samples. Accordingly, pixels with NDVI values equal to or greater than 0.19 were delineated as forest for both 2024 and 2015. Finally, forest gain and loss were assessed by comparing the forest area between two years.

The result of the forest change analysis using satellite data from 2015 and 2024 is shown in Fig. 4. In the figure, green areas indicate forest gain, gray areas indicate unchanged area, and red areas indicate forest loss. By comparing the result with Fig. 2, it can be confirmed that regions with vegetation recovery were successfully identified as forest gain. Additionally, as shown in Table 1 and Fig. 5, forest change rates—calculated as the total area of forest change per 1,000 km² of district area or protected forest—were generally lower in protected forests compared to the overall average of the target districts. Particularly, PP-PPT-TKS Protection Area exhibited a significantly lower loss rate than Luang Prabang district, to which it belongs. Although Luang Prabang district is an area of active development, large-scale development has not been observed within the protected forest in the district.

Based on the above, the implementation of the projects, PAREDD and F-REDD, was found to be effective in curbing forest loss.

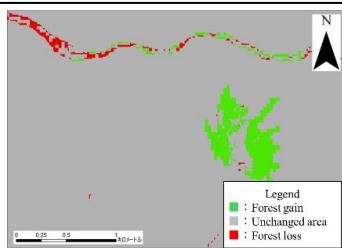


Figure 4 Results of Forest Change Analysis
(Center coordinates: 102.34°E 19.68°N)

Table 1 Forest Change per 1000 km²
in the Entire Target Districts and
Protected Forests

	Forest gain per 1000 km ² [km ²]	Forest loss per 1000 km ² [km ²]
Overall average	0.7	2.3
PP-PPT-TKS Protection Area	0.1	0.2
Nam Beng National Protection Forest	1.0	1.1

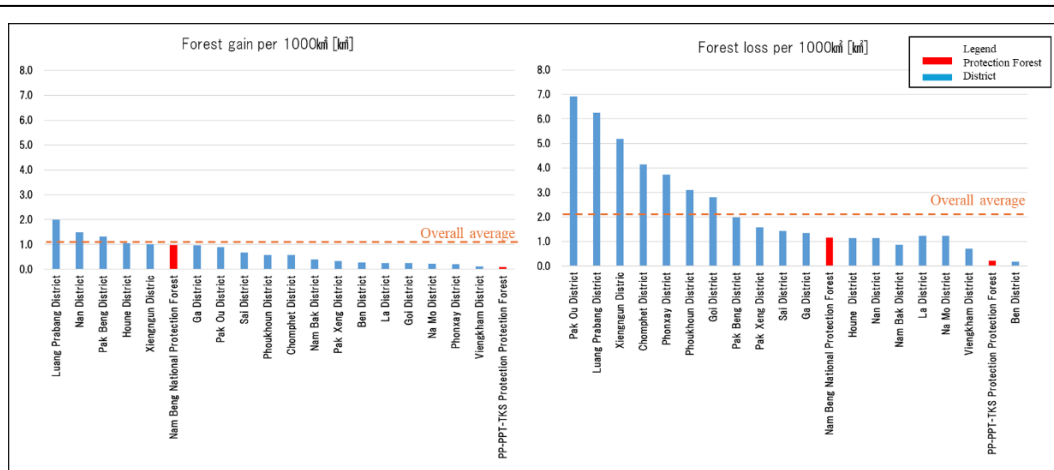


Fig. 5 Forest Change per 1000 km² in Target Districts and Protected Forests.
Left: Forest gain per 1000 km², Right: Forest loss per 1000 km²

(End)