Report Number: ICRR0023978

Total Project Cost (USD)

37,428,500.09

1. Project Data

Project ID Project Name

P128393 Second Lao Environment & Social Project

Country Practice Area(Lead)

Lao People's Democratic Republic Environment, Natural Resources & the Blue Economy

Closing Date (Original) L/C/TF Number(s) 30-Jun-2021

IDA-53830,IDA-56200,IDA-H9150,TF-

16619

Bank Approval Date Closing Date (Actual)

02-Apr-2014 30-Jun-2023

IBRD/IDA (USD) Grants (USD)

Original Commitment 17,000,000.00 6,825,688.00 **Revised Commitment** 38,825,688.00 6,825,688.00

Actual 37,428,500.09 6,825,688.00

Prepared by Reviewed by **ICR Review Coordinator** Group

Katharina Ferl Vibecke Dixon Avjeet Singh IEGSD (Unit 4)

Project ID Project Name

P128392 Second Lao Environment & Social Project (P128392)

Total Project Cost (USD) L/C/TF Number(s) Closing Date (Original)

Closing Date (Actual) **Bank Approval Date**

02-Apr-2014		
	IBRD/IDA (USD)	Grants (USD)
Original Commitment	0.00	0.00
Revised Commitment	0.00	0.00
Actual	0.00	0.00

2. Project Objectives and Components

a. Objectives

According to the Project Appraisal Document (PAD) (p. viii) and the Financing Agreement of My 14, 2014 (p. 6) the objective of the project was "to strengthen the management systems for national protected areas conservation and for enforcement of wildlife laws".

In April 2015, the project received Additional Financing (AF) in the amount of US\$15.0 million to scale up certain activities. Also, the objective of the project was revised to "to help strengthen selected environmental protection management systems, specifically for protected areas conservation, enforcement of wildlife laws, and environmental assessment management."

The objective will be parsed into three objectives for the purpose of this review:

- i. To help strengthen the environmental protection management system for protected areas conservation:
- ii. To help strengthen the environmental protection management system for enforcement of wildlife laws;
- iii. To help strengthen the environmental protection management system for environmental assessment management.
- b. Were the project objectives/key associated outcome targets revised during implementation? Yes

Did the Board approve the revised objectives/key associated outcome targets? Yes

Date of Board Approval 29-Apr-2015

c. Will a split evaluation be undertaken?
No

d. Components

The project included three components:

Component 1: Institution Development and Capacity Building (appraisal estimate US\$6.5 million, actual US\$6.50 million, revised US\$14.40 million, actual US\$19.20 million): This component was to finance sub-projects which were to be implemented through Environment Protection Fund's (EPF's) window Policy Implementation and Capacity Enhancement (PICE). Sub-projects were to include: i) capacity building for national biodiversity planning and monitoring; ii) capacity/institution building for PA management/wildlife conservation; iii) capacity building for addressing regional wildlife trafficking; iv) human resources development for wildlife and PA management; v) constituency building of high level officials; and vi) constituency building of public administration. Additional sub-projects were to be identified during project implementation.

Component 2: Management of Wildlife and Protected Areas (appraisal estimate US\$8.60 million, revised US\$20.6 million, actual US\$13.11 million): This component was to finance sub-projects which were to be implemented through the EPF's window Community and Biodiversity Investment (CBI). The initially proposed sub-projects were to include: i) Management of the Nakai Nam Theun NPA and the Nam Et Phou Louey NPA; ii) Coordination of NPA management in Bolikhamxay Province, Khammouane Province, Houaphan Province, Luang Prabang Province, Xiengkhouang Province, and iii) wildlife law enforcement in Bolikhamxay Province, Khammouane Province, and Houaphan Province.

Component 3: Project Administration and EPF Capacity Building (appraisal estimate US\$3.20 million, revised US\$5.40 million, actual US\$7.43 million): This component was to finance the administration of the sub-project mechanism by EPF. It was to include capacity building of EPF staff and systems including fund raising, compliance with the World Bank's fiduciary requirements, especially procurement, and environment and social safeguards, monitoring and evaluation, communicating with stakeholders, and facilitating effective coordination and cooperation among SDAs.

The cost of refinancing for the original PPA (IDA Q843) was: \$0.53 million at approval; \$0.27 million actual. The cost of the PPA for the 2015 AF was: \$0.90 million at approval; \$0.42 million actual.

When the project received AF in April 2015, the scope and coverage of the original project was increased by a) improving the financing capacity of the EPF; b) supporting capacity building of national, provincial, and district institutions to implement the Lao legislation on environment and social impact; c) strengthening the university environment and social curriculum; d) broadening project support to forested upper-watersheds of rivers important to hydropower, agriculture irrigation, and flood prevention; and (e) increasing the number of eligible provinces from five to eight.

e. Comments on Project Cost, Financing, Borrower Contribution, and Dates
Project cost: The project was estimated to cost US\$40.22 million. Actual cost was US\$40.42 million.

Financing: The project was financed by an IDA grant in the amount of US\$4.50 million (of which US\$4.23 million disbursed), an IDA credit in the amount of US\$12.50 million (of which US\$11.49 million disbursed), an IDA credit in the amount of US\$15.0 million (of which US\$14.87 million disbursed), and a Trust Fund in the amount of US\$6.82 million (which completely disbursed).

Borrower Contribution: The Borrower was to contribute US\$1.4 million. Actual contribution was US\$3.0 million.

Dates: The project was restructured five times:

- On April 29, 2015, the project was restructured to: i) receive AF in the amount of US\$15.0 million to increase the scope of PDO and components, including renaming project from PAW to LENS2; ii) revise/add PDO Indicators (two revised, two new); iii) trigger Safeguard policy on international waterways (OP/BP 7.50).
- On February 14, 2018, the project was restructured to: i) redistribute funds across components 1 and 2 (to reflect actual costs); ii) reallocate unused project preparation advance (PPA) refinancing balance to implementation budget; iii) revise results indicators (all five PDO indicators and several intermediate indicators); iv) increase ceiling for advance disbursement to designated account; and v) partially cancel DFRM subproject activities for re-delineation of forest boundaries and concessions.
- On August 28, 2020, the project was restructured to extend the project implementation by 12 months from June 30, 2021, to June 30, 2022, to allow for the completion of project activities which were delayed due to COVID-19 travel restrictions, time needed to resolve an external infrastructure risk, and restructuring of departments at Ministry of Natural Resources and Environment (MONRE).
- On March 21, 2022, the project was restructured to: i) extend the project implementation by six months from June 30, 2022, to December 31, 2022, to allow for the completion of project activities, support the preparation of the proposed Environmental and Waste Management Project (P175996) and to maintain the project's Project Management Unit for the upcoming project; and ii) revise disbursement percentages of the GEF grant and IDA credit to ensure full utilization of funds.
- On December 23, 2022, the project was restructured to: i) extend the project implementation period by six months from December 31, 2022 to June, 30, 2023 to allow for MONRE to complete its capacity strengthening activities; and ii) revise disbursement percentages to ensure full utilization of IDA credit after GEF grant is fully disbursed.

3. Relevance of Objectives

Rationale

Country and sector context. According to the PAD (para. 4) a challenge to long-term prosperity in Lao was the lack of investments in the natural resource base that fueled, at the time of project appraisal, the economic growth, especially natural habitats. Continued, unsustainable degradation of natural ecosystems had the potential to negatively impact infrastructure and public health through the enhanced probability of flooding, declining water availability and quality, soil fertility loss, spread of diseases and alienation of economic opportunities such as nature tourism. All of which affected the poorest population disproportionally.

Despite progress in poverty reduction, many Lao citizens remained poor and dependent on natural resources. At the time of project appraisal, in rural areas, non-timber forest products (NTFPs) contributed to about 30-70 percent of income for forest-dependent households. Forests covered 40 percent of the country.

However, forests were threatened by deforestation, encroachment, degradation as a result of fires, unsustainable wood extraction, shifting cultivation, agricultural expansion, industrial tree plantation infrastructure development, and urban expansion. Especially, Protected Areas (PAs) were threatened by road construction, mining, and hydropower development. Also, hunting, and illegal wildlife products (for food, skins, medicinal ingredients and ornaments) presented a threat to biodiversity and habitats.

The government's PA management policy was based on integrated conservation and development, aiming to collaborate with the local population. However, the government faced issues with the complex PA management organization which led to diffuse accountability with limited funding, staff, equipment, and training.

Alignment with the government strategy. The objective of the project was in line with the government's Forestry Strategy 2020 which aims to restore forested areas to about 70 percent of the total land area, "to generate a sustainable stream of forest products, to preserve unique and threatened habitats, and promote environmental conservation and protection". The objective of the project also supported the government's 2007 Wildlife Law which needed stronger enforcement due to the country's limited capacity. Finally, the objective of the project was in line with the government's 2019 National Green Growth Strategy, which stresses the need to benefit from the nation's ample natural resources more sustainably and efficiently while taking a development path that is more resilient to risks such as climate change.

Alignment with the World Bank strategy. The objective of the project was in line with the World Bank's most recent Country Partnership Framework (FY22-26), particularly high-level outcome 3 "sustainable livelihoods through better management of natural resources", and objective 8 "improved and climate-adaptive management of forests, biodiversity, and protected areas".

This was the fourth phase of a horizontal Adaptable Program Lending (APL) on "Strengthening Regional Cooperation for Wildlife Protection in Asia" program. Phase 1 included Nepal and Bangladesh. Phase 2 (Bhutan) was ongoing at the time of this project's preparation. Phase 3 (India) was dropped.

The objective of the project was pitched at an appropriate level to address the development problem.

Rating

High

4. Achievement of Objectives (Efficacy)

OBJECTIVE 1

Objective

To help strengthen the environmental protection management system for protected areas conservation

Rationale

Theory of Change: The project's theory of change stated that project activities such as building capacity in different areas including for national biodiversity planning and monitoring, PA management/wildlife conservation, addressing regional wildlife tracking, and developing human resources for wildlife and PA management were to result in several outputs. These outputs were to include capacity for national biodiversity planning and monitoring as well as capacity/institution for PA management/wildlife conservation being built, and human resources for wildlife and PA management being developed. Finally, these outputs were to result in the intended outcome of the environmental protection management system for protected areas conservation being strengthened.

The theory of change was sound. However, there were logical gaps such as the underlying assumption that training and building capacity for PA management/wildlife conservation would automatically lead to behavior change.

Outputs:

- A score tracked the development and management of an NPA system, achieving the target of tracking the score. This indicator measured progress towards developing and managing an effective NPA management system with points awarded in seven categories (target of 90 out of 100 possible points). The seven categories included: i) final report on optimization of the NPA management system, including legal, policy, institutions, and financing; ii) baseline NPA information available; iii) NPA Master Plan approved; iv) NPA management guidelines officially approved by MONRE; v) MAF DOF or successor department website operational; vi) database for tracking investments in NPAs; vii) draft decrees formulated to establish two national parks. The project achieved a score of 100 points, target achieved.
- 191 village organizations met the terms of Conservation Agreements and, as a result, received grants for implementing their action plans, exceeding the original target of 140 village organizations and the revised target of 190 village organizations.
- 184 of those village organizations had at least 40 percent female participation, exceeding the target of 160 village organizations having at least 40 percent female participation.

The following outputs are stated in the ICR but not included in the Results Framework. Therefore, they did not have any targets.

- The project supported the establishment of six national parks. In 2019 Nakai Nam Thuen and Nam Et-Phou Louey national parks were established. Between 2020 and 2021, Hin Nam No, Dong Hua Sao, Xe Pian, and Phou Khao Khouay national parks were established. Being identified as national park provides stricter protection, enhances the international recognition of the parks, and establishes national park Management Offices to improve the protection and management of their respective park.
- Surveys conducted before and after the outreach campaigns of the Nam Et Phou Louey NPA subproject found that there was an average increase of 29 percent in stakeholder knowledge about the national park.

Outcomes:

• The Management Effectiveness Tracking Tool (METT) scores across the 11 PAs increased from zero in 2016 to an average of 24 in 2023, exceeding the original target of a score of 15 and the revised

target of a score of 10. The METT scoring was estimated through a self-assessment covering a broad range of management effectiveness issues such as: a) management planning; ii) resource protection; iii) infrastructure and facilities; iv) law enforcement; v) stakeholder engagement; vi) visitor management; and vii) budget and financial management.

The following outcome was reported in the ICR but was not included in the Results Framework. Therefore, it did not have a target.

• As a result of financing provided to train, equip, and fund 11 new rangers to conduct regular patrols, the area covered by rangers increased from 60 percent to over 80 percent of the park.

The project substantially improved the capacity for PA conservation as demonstrated through the achievement of the target of the average METT score for all 11 PAs.

Rating Substantial

OBJECTIVE 2

Objective

To help strengthen the environmental protection management system for enforcement of wildlife laws

Rationale

Theory of Change: The project's theory of change stated that project activities/inputs such as implementing sub-projects including: i) managing the Nakai Nam Theun NPA and the Nam Et Phou Louey NPA; ii) coordinating NPA management in Bolikhamxay Province, Khammouane Province, Houaphan Province, Luang Prabang Province, Xiengkhouang Province, and iii) enforcing wildlife law in Bolikhamxay Province, Khammouane Province, and Houaphan Province were to result in several outputs. These outputs were to include improved capacity in various offices such as Provincial Offices of Forest Inspection (POFI), Provincial offices of Forest Resources Management (PFRM), WMPA, as well as improved capacity within communities and other stakeholders to conserve NPAs and protect wildlife in five provinces against threats from infrastructure development and illegal use or trade of natural resources. These outputs were to result in the outcome of environmental protection management system for enforcement of wildlife laws being strengthened.

The theory of change was sound. However, the theory of change had a logical gap assuming that improved capacity within NPAs was to automatically result in better protection of natural resources. Also, there was an attribution issue since other factors might be contributing to this outcome too and achievement of this outcome cannot solely be attributed to this project.

Outputs:

• On 643,678 hectares of area within selected PAs the status of selected wildlife population and threats were measured, exceeding the original target of 242,000 hectares and the revised target of 634,000 hectares.

- The number of wildlife crime cases detected by law enforcement officers of STAs supported by the project, increased from 188 cases in 2016 to 5,593 cases in 2023, exceeding the target of 3,100 cases.
- 648 people were trained at the central and local level on theory and practical knowledge on law, patrol inspection, investigation, and prosecution of crimes, exceeding the target of 400 people being trained.

The following outputs are stated in the ICR but not included in the Results Framework. Therefore, they did not have any targets.

- The project supported the development of key strategic and operational documents including the Lao Wildlife Enforcement Network (Lao-WEN) Strategic Plan, Lao-WEN Standard Operating Procedures, Lao Wildlife and Forest Law Enforcement Network Operational Manual, and the National Wildlife and Aquatic Crime Response Action Plan. This contributed towards Lao-Wen becoming operational.
- The project established Provincial Environmental Police Divisions in all provinces resulting in improved coordination and reporting, establishment of Provincial Wildlife Enforcement Networks (P-WENs) and raised awareness within police departments.
- An Information management System was developed to collect records and report information about wildlife law violations to enable more systematic monitoring wildlife crimes.

Outcomes:

- 41 wildlife trafficking cases involving CITES1 listed species were referred to the national and/or
 provincial public prosecutor office, not achieving the target of 75 cases. According to the ICR (p. 41)
 evaluating the achievement was complicated since the prosecution referrals only counted CITES1
 species while the investigations in the sub-indicator included all CITES species and non-CITES
 species.
- 116 wildlife trafficking cases involving CITES1 and non-CITES listed species were opened for investigation not achieving the target of 250 cases.

While the project was able to strengthen Lao's wildlife enforcement capacity, further strengthening is necessary for it to be effective and sustainable. Achievement of this objective was Modest, due to low achievement.

Rating Modest

OBJECTIVE 3

Objective

To help strengthen the environmental protection management system for environmental assessment management

Rationale

Theory of Change: The project's theory of change stated that project activities/inputs such as improving the financing capacity of the EPF, supporting capacity building of national, provincial, and district institutions,

strengthening the university environment and social curriculum, as well as broadening project support to forested upper-watersheds of rivers important to hydropower, agriculture irrigation, and flood prevention were to result in several outputs, such as improved financial capacity of the EPF, capacity built in various institutions to implement legislation on environment and social impact. These outputs were to result in the outcome of a strengthened environmental protection management system for environmental assessment management.

The theory of change was sound and logical without any logical gaps. However, the achievement of his objective cannot solely be attributed to this project.

Outputs:

- A score of 80 points (out of possible 100 points) was achieved for the development of national, provincial, or sectoral guiding documents and planning tools that integrated environment into development planning, not achieving the target score of 90 points. The project produced the following documents and tools: i) national green growth strategy; ii) integrated spatial planning guidelines; iii) Strategic Environmental Assessment (SEA) guidelines; iv) six provincial Integrated Spatial Plans; and vii) Environment and Natural Resources and M&E guidelines. The project also developed two SEAs which had not been approved when the project closed.
- A score of 80 points was achieved for the delivery of the following outputs: i) a pollution prevention
 and control regulation was submitted for approval; ii) a waste and hazardous chemical management
 regulation was submitted for approval; iii) a national environmental standard regulation was submitted
 for approval; iv) national pollution control planning documents were approved including: Vision to
 2030, 10 Year Strategy (2016-2025), and five year action plan (2016-2020). The target of 80 points
 was achieved.
- The project contributed to the upgrading of curricula in wildlife management, and community development in PAs, benefitting 877 students (of which 446 were female). This output did not have a target.
- 46 five-year provincial or sectoral development plans that included environmental planning, monitoring, assessment, or management components were supported by MONRE or MPI, exceeding the target of 20 plans.
- 32 plans on environmental monitoring arrangements were supported by MONRE, exceeding the target of eight plans.
- Six plans on integrated spatial planning (ISP) and/or strategic environmental assessment (SEA) were supported by MONRE, not achieving the target of seven plans.
- Eight plans were supported by MPI or National Institute for Economic Research (NIER) on green growth M&E, exceeding the target of five plans.
- 146 up to date reports were published on relevant government websites including: i) compliance monitoring for category 2 projects; ii) state of air and noise quality; iii) national pollution inventory, exceeding the target of 87 reports.
- 45 compliance monitoring reports for hydropower projects registered in environment impact category 2 were published on the MONRE website, exceeding the target of 40 reports.
- 66 compliance monitoring reports for mining projects registered in environment impact category 2 were published on the MONRE website, exceeding the target of 24 reports.
- Six compliance monitoring reports for road projects registered in environment impact category 2 were published on the MONRE website, not achieving the target of seven reports.

- 18 state of air and noise quality reports were published on the MONRE website, exceeding the target of seven reports.
- 11 national pollution inventory reports were published on the MONRE website, exceeding the target of nine reports.

Outcomes:

- The area within selected PAs where the gross forest loss rate was measured, increased from 305,000 hectares in 2016 to 1,250,385 hectares in 2023, achieving the target of 1,250,000 hectares.
- The percentage of category 1 and 2 projects that were under design, construction or operation that had a valid Environmental Compliance Certificate (ECC) increased from 19 percent in 2016 to 82 percent in 2023, far exceeding the target of 50 percent.
 - The percentage of category 1 hydropower projects with ECC increased from 35 percent in 2016 to 79 percent in 2023, exceeding the target of 50 percent.
 - The percentage of category 1 mining projects with ECC increased from 11 percent in 2016 to 90 percent in 2023, exceeding the target of 50 percent.
 - The percentage of category 1 road projects with ECC increased from zero in 2016 to 65 percent in 2023, exceeding the target of 50 percent.
 - The percentage of category 2 hydropower projects with ECC increased from 65 percent in 2016 to 87 percent in 2023, achieving the target of 85 percent.
 - The percentage of category 2 mining projects with ECC increased from 10 percent in 2016 to 84 percent in 2023, exceeding the target of 50 percent.
 - The percentage of category 2 road and railway projects with ECC increased from zero in 2016 to 95 percent in 2023, exceeding the target of 50 percent.

The project was able to deliver several outputs that may contribute to building capacity at the national, provincial, and district institutions in key areas for environmental assessment and management. The increased areas under protection and the increase in percentage of projects with a valid ECC demonstrate a strengthened environmental protection management system for environmental assessment management. Objective 3 is thus rated Substantial.

Outputs that were relevant across all objectives:

- 16,246 staff of SDA and SDA partner institutions received formal short courses (between eight and 16 hours) or participated in study tours under the project, exceeding the target of 3,000 staff. Out of this staff, 4,405 were female, exceeding the target of 600 female staff. According to the World Bank team (April 9, 2024), the target was substantially exceeded due to the COVID-19 pandemic and the cancellation of in person trainings. Instead, the trainings were held virtually, allowing more people to participate.
- The amount of financing mobilized by the Community and Biodiversity Investment Window (EPF) each year from public sources increased from US\$350,000 in 2014 to US\$396,781, not achieving the target of US\$700,000.
- The amount of financing mobilized by EPF from private sources increased from US\$450,000 in 2014 to US\$1.88 million in 2023, exceeding the target of US\$900,000.
- The project made investments in the National University of Laos (NUOL) and National Academy of Public Administration (NAPA). The five NUOL faculties—Economics and Business Management (FEB), Environmental Sciences (FES), Forest Science (FFS), Natural Science (FNS), and Social

Science (FSS)—were able to build institutional and academic capacity, enhance technical skills, improve curricula on environmental management and biodiversity conservation, and provide training for government staff.

Outcomes that were relevant across all objectives:

The index of functional capacity is based on self-defined capacity criteria and scoring systems adapted to the needs and priorities of each entity or group of entities. The indexes typically include criteria related to different capacity aspects such as existence of a functional board, staffing, fiduciary system etc.

- The score of functional capacity of EPF and key institutions implementing subprojects increased from 11 in 2016 to 46 in 2023, exceeding the target score of 31.
- The score of the functional capacity of the Environment Protection Fund increased from 22 in 2015 to 72 in 2023, exceeding the target score of 52.
- The score of the functional capacity of the Department of Public Relation of the Prime Minister Office increased from 11 in 2015 to 33 in 2023, not achieving the target score of 34.
- The average score of functional capacity of faculties (NUOL, FFS, FSS, FNS, FES and FEB) increased from 11 in 2016 to 31 in 2023, exceeding the target score of 28.
- The average score of functional capacity of Protected Area Management Units (NEPL, WMPA, and 7 PAFOs) increased from 11 in 2016 to 33 in 2023, exceeding the target score of 31.
- The score of functional capacity of MAF DOF Protected Area Management Division increased from 10 in 2014 to 69 in 2023, exceeding the target score of 22.
- The score of functional capacity of National Academy of Public Administration (NAPA) increased from one in 2016 to 40 in 2023, exceeding the target score of 13.

Since the project achieved most of the targets, the objective is assessed to be substantial.

Rating Substantial

OVERALL EFFICACY

Rationale

Achievement of the first and third objective was Substantial while achievement of the second objective was Modest. While the project was able to strengthen Lao's wildlife enforcement capacity, further strengthening is necessary for it to be effective and sustainable. The efficacy is rated as Substantial with moderate shortcomings.

Overall Efficacy Rating

Substantial

5. Efficiency

Economic efficiency:

At the time of appraisal, a full economic analysis was not completed due to data constraints (such as no data for project payoffs from improved enforcement of wildlife laws) and the indirect use values of many benefits associated with the conservation of protected areas and biodiversity. The analysis found that project's interventions in the Nam Et – Phou Louey (NEPL) National Protected Area (NPA) could have a net present value (NPV) as high as US\$8.3 billion over a 10-year period. This was based on benefits derived from biodiversity conservation, consumption uses, including non-timber forest products (NTFPs) and ecotourism, watershed protection, and carbon sequestration. For improved wildlife law enforcement, illegal wildlife trade in Southeast Asia was estimated to be within the range of US\$2.6 to \$US3 billion, with simulations for project interventions conservatively indicating benefit-cost ratios above 1, and in some cases reaching above 40, showing very high benefits compared to the investment costs.

The economic analysis was refined in 2015, when the project received Additional Financing. The analysis was based on a literature review and estimated that the NPV of ecosystem services provided by the additional 400,000 hectares of protected area was to be approximately US\$3.8 billion over 10 years. The total NPV of ecosystem services provided under the combined project area of 1,258,000 hectares of NPA was, therefore, to be approximately \$12 billion over a 10-year period. The AF document did not state what discount rates the financial analyses used.

At closing, the project did not use the same economic analysis approach as in the Additional Financing. Given the lack of actual data, the ICR provided an ex-post cost-benefit analysis to demonstrate that the project's capacity-building and livelihood benefits are likely to exceed the project costs.

Operational efficiency:

The project's implementation period was extended three times by a total of 24 months to allow for the completion of project activities, which had been delayed due to multiple reorganizations/restructurings of SDAs by MAF and MONRE, insufficient capacity at the EPF, and the Covid-19 pandemic.

Given the lack of traditional economic analysis at closing, which could be compared to the economic analysis conducted at the AF stage due to data constraints, coupled with the relative shortcomings in operational efficiency, the project's efficiency is rated Modest.

Efficiency Rating

Modest

a. If available, enter the Economic Rate of Return (ERR) and/or Financial Rate of Return (FRR) at appraisal and the re-estimated value at evaluation:

	Rate Available?	Point value (%)	*Coverage/Scope (%)
Appraisal		0	0 □ Not Applicable
ICR Estimate		0	0 □ Not Applicable

^{*} Refers to percent of total project cost for which ERR/FRR was calculated.

6. Outcome

Relevance of the objective is High given its alignment with the World Bank's most recent Country Partnership Framework (FY22-26) and the country's needs and priorities. Efficacy is Substantial with moderate shortcomings and Efficiency is Modest. Overall, the project's outcome rating is Moderately Satisfactory.

a. Outcome Rating
 Moderately Satisfactory

7. Risk to Development Outcome

The project's risks to development outcomes can be classified into the following categories:

Economic: According to the ICR (para. 105) the current macroeconomic situation in Lao with high inflation might negatively impact the sustainable use of natural resources. Also, as a result of high financing needs and limited financing options, low foreign exchange reserves, and depreciation pressures, the government faces solvency and liquidity challenges. These circumstances might present a significant challenge to addressing continued encroachment and land use change pressures to convert forest lands for other economic uses and protect the wildlife.

Government commitment/financing: The EPF and MONRE have been working on identifying financing sources, ensuring continued EPF capacity building, and implementing key activities related to climate change and environmental management; a firm government commitment is still needed. The World Bank is continuing its engagement in Lao with the Lao Landscape and Livelihood Project (P170559, financing amount US\$50 million), which aims to further enhance the investigative capabilities of provincial agencies, improve cross-border coordination, and increase public awareness and education. However, despite this follow-on project, the lack of government budget remains a risk for the long-term sustainability of project outcomes.

Technical: According to the ICR (para. 104) the project was able to build capacity within the EPF. However, there is a risk that capacity development will not continue, or capacity built will not be sustainable after external financial support has ended.

8. Assessment of Bank Performance

a. Quality-at-Entry

According to the PAD (p. 36) the project was built on the First Lao Environment and Social Project (LENS1) as well as the Nam Theun 2 Hydropower Project (NT2) which demonstrated the effectiveness of a demand-driven subgrant model with EPF as the main implementing agency in raising capacity at the national, provincial, and district levels. Also, implementation experience from LENS1 emphasized that medium size subgrants were more efficient than small grants due to lower transaction costs and broader impacts as well as institutional capacity being a key limitation in effective environment management (ICR para. 76).

According to the PAD (p. 9) the World Bank team identified relevant risks and rated the following as High: i) stakeholder risk since not all tranches of society might be ready for new wildlife and enhanced PA management regulations; ii) social and environmental risk related to insufficient consultation of, or participation by, local communities in park management, fisheries and river basin management leading to further marginalization and antagonism; and iii) delivery monitoring and sustainability due to lack of experienced staff in MONRE, WMPA, NEPL MU, and MAF to ensure effective monitoring and evaluation.

The project tried to mitigate these risks by developing a Community Engagement Framework (CEF) (an approach to partner with communities), an Environment and Social Management Framework, and a Resettlement Policy Framework, as well as providing M&E training to the agencies stated above. Additional risks were rated Substantial including: i) insufficient capacity to implement the project with increased financial revenues and geographic scope; and ii) complex project design due to involving several government entities and wide geographic scope. The World Bank aimed to mitigate these risks by providing technical training. Mitigation measures were insufficient, and the project experienced implementation delays due to insufficient capacity at the EPF. The World Bank team did not identify the risk of the 2017 EPF decree changing the institutional arrangements of EPF that ended up reducing the independent authority of the EPF board as well as the scope of its agenda. Also, the World Bank team did not identify the risk of SDAs being reorganized/restructured several times by MAF and MONRE, resulting in implementation delays.

The project's Results Framework had several shortcomings (see section 9a for more details).

Quality-at-Entry Rating Moderately Satisfactory

b. Quality of supervision

According to the World Bank team (April 9, 2024) the team conducted a total of 20 supervision missions throughout project implementation. Supervision was complex since the team had to supervise 47 subprojects which were implemented through 37 Subproject Delivery Agencies (SDAs) including 19 provincial authorities. The World Bank team also conducted regular training for SDA staff given its limited capacity and high staff turnover. Training areas included M&E, procurement, Financial Management, and other areas of project management. The team clarified that the Bank provided more detailed technical

support earlier in the subproject preparation and implementation, but due to the budget constraints, later prioritized supervision and gradually handed over some of the subproject responsibilities to EPF as they had been trained for that.

The World Bank team restructured the project for a total of five times to improve implementation. The project's Results Framework was revised three times. However, when the project closed, not all M&E issues had been adequately addressed (see section 9b for more details).

Overall, the Bank performance is rated as Moderately Satisfactory.

Quality of Supervision Rating Moderately Satisfactory

Overall Bank Performance Rating Moderately Satisfactory

9. M&E Design, Implementation, & Utilization

a. M&E Design

The original objective of the project was overly broad. When the project received AF in April 2015, the objective of the project was revised and became more specific. While the project focused on appropriate aspects of protected areas and wildlife, it was not possible to measure conservation or wildlife crime outcomes during the project implementation period given that the achievement of these outcomes requires a longer period, and they cannot be attributed solely to the project's capacity strengthening activities.

The selected indicators encompassed all aspects of the PDO statement. However, the Results Framework was overly complex and included a large number of PDO indicators (19) and intermediate outcome indicators (19), which were sufficiently specific and measurable. According to the ICR (para. 86) during project preparation, weak M&E capacity at the EPF and the SDAs was identified as a challenge. Also, the reporting and monitoring structure with SDAs collecting and reporting data to the EPF, which was to consolidate the data in semi-annual reports, was overly complex and would have required more M&E capacity than available. Furthermore, the project would have benefitted from conducting consistent and reliable Management Effectiveness Training Tool (METT) score evaluations for which it lacked capacity.

b. M&E Implementation

According to the ICR (para. 87) the project faced several M&E implementation issues. For example, annual and semi-annual reports were often submitted late and included inconsistencies. Also, reporting by SDAs often lacked key information or included outdated information, and indicators had poor accuracy and verification. The World Bank team tried to address these issues by conducting several trainings. However, issues persisted as a result of high staff turnover, limited M&E capacity and support (especially at the SDA level), and poor internal M&E arrangements and governance (such as SDA M&E staff not being accountable to EPF, making oversight more challenging). Furthermore, EPF used complex

Excel sheets to manage results reporting instead of an M&E software, which made indicator management and verification more complicated, especially given the high staff turnover.

In February 2018, the Results Framework was revised, and the wording of several indicators was improved, allowing for a better measuring of results. Also, the World Bank team provided close support through conducting an internal M&E governance analysis of the EPF and developing and executing an M&E action plan. The ICR (para. 88) stated that by 2020, the timeliness of annual reports and subproject briefs as well as accuracy of indicators had improved significantly as a result of a new M&E officer, M&E assistant and consultant which had been hired to specifically assess METT scores. The M&E team also supported SDAs with limited M&E capacity.

According to the ICR (para. 91) when the project closed, there were ongoing M&E gaps such as in reporting on results, discrepancies and inconsistencies in EPF's final implementation progress report and its post-closing project completion report as well as in some of the SDA subproject reports.

c. M&E Utilization

According to the ICR (para. 89) M&E data were used to inform decision making. Due to the demand-driven subproject model, new subprojects were designed and implemented based on lessons learned from ongoing subprojects. Also, M&E data allowed for the correction of ongoing subprojects.

Despite the shortcomings in the M&E design and implementation, there is sufficient M&E data to substantiate a Substantial Efficacy rating (and thus also the Moderately Satisfactory outcome rating).

M&E Quality Rating Substantial

10. Other Issues

a. Safeguards

The project was classified as category B and triggered the World Bank's safeguard policies Environmental Assessment (OP 4.01), Natural Habitats (OP 4.04), Forests (OP 4.36), Pest Management (OP 4.09), Physical Cultural Resources (OP 4.11), Involuntary Resettlement (OP 4.12) and Indigenous Peoples (OP 4.10). According to the ICR (para. 93) the project prepared an Environmental and Social Management Framework (ESMF), a Community Engagement Framework (CEF), and a Resettlement Framework. The project prepared a negative list for screening project investments, excluding activities that could pose significant potential negative environmental and/or social impacts and risks. This negative list was incorporated into the project implementation manual (PIM), ESMF, and CEF.

Also, the project prepared subproject-specific Environmental and Social Assessments (ESAs) and Environmental and Social Management Plans (ESMPs). All subproject proposals were screened and approved by the World Bank to ensure that they met the eligibility criteria. In addition, a Pest Management Plan was included in the ESMF, providing screening procedures as well as a negative list to prevent the use

of pesticides. No incidents or complaints on environmental risks and impacts were reported during implementation.

When the project received AF in April 2015, the safeguard policy on Projects on International Waterways (OP 7.50) was also triggered because a few of the protected area subprojects possibly were to finance village-level investment such as small rural water supply and small scale irrigation pumped from rivers that were tributaries to the Mekong River, an international waterway.

When the project closed, the project's compliance with all safeguards was rated Satisfactory.

b. Fiduciary Compliance

Procurement:

According to the ICR (para. 96) the World Bank assessed the counterpart's procurement capacity during project appraisal. Based on this assessment, recommendations for local and international consultants were included in the procurement plan. Also, the World Bank team provided regular procurement training. However, the project experienced delays in processing procurement in the STEP system and errors in consultants' selections which required corrective measures. When the project closed, procurement was rated Satisfactory.

Financial Management:

According to the ICR (para. 97) the project experienced several financial management (FM) related issues due to a high turnover of FM staff and lack of capacity resulting in the need to conduct frequent trainings. The large number of subprojects and SDAs often needed close reviews and assistance by the World Bank team due to limited FM capacity. The project also encountered FM software challenges which could only be fully resolved during the last phase of project implementation. The external auditor's opinions were unqualified. When the project closed, FM was rated Satisfactory.

c. Unintended impacts (Positive or Negative)

NA

d. Other

11. Ratings			
Ratings	ICR	IEG	Reason for Disagreements/Comment

Outcome	Moderately Satisfactory	Moderately Satisfactory
Bank Performance	Moderately Satisfactory	Moderately Satisfactory
Quality of M&E	Substantial	Substantial
Quality of ICR		Modest

12. Lessons

The ICR (p. 38-39) included several lessons learned which were adapted by IEG:

- A programmatic approach in the natural resource sector in low-capacity environments
 can build capacity over time and contribute to sustained and amplified development
 achievements. This project made significant progress in building capacity and improving the
 quality of environmental management systems. However, these project results require
 continuous financing and capacity-building support through a strategic programmatic
 approach to ensure the achievement of the long-term goals of improved conservation,
 biodiversity protection, enhancement of ecosystem services, and reduced wildlife trafficking.
- Designing a robust and realistic M&E framework, and strengthened efforts on capacity building of clients can improve monitoring of complex projects implemented in lowcapacity environments. This project consisted of a large number of sub-projects. Due to the weak capacity of SDAs and the complex M&E framework, often did not report on their indicators in a robust and timely manner. As a result, EPF found it challenging to aggregate and report all indicators.
- Projects addressing very limited capacity across a range of national and sub-national institutions simultaneously can allow for taking advantage of synergies. In this project, strengthening the capacity of various entities at different levels across the country allowed for entities to collaborate, support, and learn from another.

13. Assessment Recommended?

No

14. Comments on Quality of ICR

The ICR provided an adequate overview of project preparation and implementation, was internally consistent, and sufficiently critical of possible sustainability issues. The Theory of Change was well developed, and the ICR provided adequate evidence to justify the results. The lessons learned were useful for future projects in this area.

However, while the necessary material was covered in the report, the ICR lacked conciseness. The main body of the review is 35 pages, much above the OPCS recommended length of 15, and a good proportion of the

material could have been communicated with a streamlined approach. The ICR provided a cost-benefit analysis but did not include an adequate economic analysis comparable to the one conducted during the AF stage and did not articulate the drivers behind this approach. Overall, the quality of the ICR is rated as Modest.

a. Quality of ICR Rating Modest