
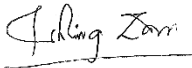




Mid-term Evaluation Report

Project Profile	
Project Code	AFoCO/024/2021
Project Title	Conservation and development of forest ecosystems biodiversity resources at Cat Tien National Park, Viet Nam
Project Duration	Start date: July 1 st , 2021 End date: December 31 st , 2025
Implementing Agency	Cat Tien National Park (CTNP), Viet Nam Administration of Forestry, Ministry of Agriculture and Rural Development
Participating Countries	Viet Nam
Project Site	Cat Tien National Park and buffer zone of (1) Tan Phu district (Dong Nai province) and (2) Cat Tien district (Lam Dong province)
Main Objective	<p>To improve the conservation and development of forest ecosystems biodiversity resources at CTNP engaged with sustainable livelihood improvement for communities in the buffer zone:</p> <ol style="list-style-type: none"> 1. To improve knowledge and information sharing on the biodiversity of forest ecosystems of the park for local managers and policymakers. 2. To assess the climate change and social impacts on CTNP biodiversity and integrated management measures, improve management and conservation capacities of project stakeholders, and engage local communities for forest management and protection. 3. To conduct piloting of models for sustainable livelihood improvement of communities in the buffer zones.
Budget and Source of Finance	<p>Total: USD 1,232,000</p> <ul style="list-style-type: none"> - AFoCO: USD 1,132,000 - National: USD 100,000
Beneficiaries	Park staff and communities living in the three villages, including Village 3 and Village 4 under the Phuoc Cat 2 Commune in Cat Tien district, Lam Dong Province, and Village 7 Dac Lua Commune in Tan Phu district, Dong Nai Province

Summary of Evaluation Report	
Evaluation Period	June 2023 to August 2023
Evaluation Site	Cat Tien National Park and buffer zones of (1) Tan Phu district (Dong Nai province) and (2) Cat Tien district (Lam Dong province)
Evaluation Check Points	<p>The following checkpoints help comprehensively assess the project's progress, challenges, and opportunities at the mid-term stage. They serve as valuable guidance for making informed decisions and implementing necessary adjustments to complete the project.</p> <ol style="list-style-type: none"> (1) Evaluate the extent to which the project has achieved its objectives and milestones at the midpoint. Assess the progress made towards each objective and determine if any adjustments or corrective actions are required. (2) Assess project outputs and deliverables' quality, quantity, and timeliness. Verify if they align with the project plan and contribute to the intended outcomes. (3) Evaluate the level of engagement and satisfaction of stakeholders, including project beneficiaries, partner organizations, and local communities. Assess if their needs and expectations are being addressed and if communication channels are effective. (4) Review the utilization of project resources, including financial, human, and technical resources. Assess if resources are allocated efficiently, if any resource gaps exist, and if the project is on track with its budget and timelines. (5) Assess the potential for project sustainability beyond its completion. Evaluate if the project's outcomes and benefits can be sustained over the long term and if there are opportunities for scaling up or replicating successful practices. (6) Identify and document lessons learned from project implementation. Assess if the project has been responsive to changing circumstances, adaptive to challenges and if lessons learned are incorporated into project adjustments.

	Signature	Date	Name/Title
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Group photo on the last day of on-site evaluation at Cat Tien National Park

Notes to Readers

The information presented in this report is based on data and observations collected during the evaluation mission. It is essential to note that the opinions, views, and recommendations expressed in this evaluation report do not reflect the official stance or position of the Asian Forest Cooperation Organization (AFoCO) Secretariat. We extend our sincere appreciation to the Implementation Agency for their gracious hospitality and support, which facilitated the successful completion of the evaluation mission. If you require additional information or seek clarification on any matters discussed in this report, please do not hesitate to contact Soozin Ryang (soozin.ryang@afocosec.org).

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Table of Content

Executive Summary	8
Abbreviation & Acronyms	10
1. Introduction	11
2. Evaluation Scope and Methodology	12
3. Project Outline	18
4. Evaluation Results	22
4.1 Summary of the survey results	22
4.2 Overall project performance by evaluation criteria	23
4.2.1 Relevance	23
4.2.2 Effectiveness	24
4.2.3 Efficiency	29
4.2.4 Impact.....	30
4.2.5 Sustainability	32
4.2.6 Coherence.....	34
4.3. Best practices and lessons learned	37
4.3.1 Valuable Discoveries Resulting from Intensive Species Monitoring and Research Efforts	37
4.3.2 Customized Capacity-Building Initiatives Strengthens Conservation Endeavors....	39
4.3.3 Building Conservation Partnerships through Livelihood Support.....	39
5. Conclusion	41
6. Recommendations	43
Reference	51
Annex I: Log Frame in Project Document	52
Annex II: Details of Completed Activities	61
Annex III: Status of Ongoing Activities	68
Annex IV: Result on Questionnaire Survey for Project Staff	72
Annex V: Result on Questionnaire Survey for Park Staff	75
Annex VI Result on Questionnaire Survey for Villagers	78
Annex VII: List of participants from the three villages for focus group interview	81
Annex VIII: List of participants from the PSC & PMU for the focus group interview	82
Annex IX: List of participants from the CTNP Staff for the focus group interview	83

List of Figures

Figure 1 Outlines the six criteria and their related questions as adopted from the OECD/DAC	12
Figure 2 Cat Tien National Park (green color) showing the project sites (orange color)	19
Figure 3 Cumulative physical performance of the project as of S1 2023	25
Figure 4 Cumulative Financial Performance as of S1-2023.....	29
Figure 5 Total number of visitors at the Nui Tuong grassland and Crocodile Lake	32
Figure 6 Average score of the project staff for all the six criteria	72
Figure 7 Average score of the CTNP Staff for all the six criteria.....	75
Figure 8 Average score of the villager based on four criteria.....	78

List of Tables

Table 1 The score system applied in the evaluation.	13
Table 2. Schedule of the field visit from 31 July to 4 August 2023.....	13
Table 3 Evaluation portfolio	14
Table 4 Evaluation matrix	14
Table 5. Project outputs and each OVIs.....	20
Table 6 Average scores provided by the three stakeholders against the six evaluation criteria.....	22
Table 7. Cumulative physical performance of each output as of S1 2023	25
Table 8 List of workshops organized by the Project.....	27
Table 9 List of training programs for communities conducted by the Project.....	27
Table 10 Staffing pattern of CTNP	33
Table 11 List of research in the CTNP from 2010 to 2023.....	36
Table 12 Project staff's perceived scores on evaluation questions and criteria, and average score on overall project performance.....	73
Table 13 List of respondents	74
Table 14 Park staff's perceived scores on evaluation questions and criteria and average score on overall project performance.....	76
Table 15 List of respondents	77
Table 16 Villagers' perceived scores on evaluation questions and criteria, and average score on overall project performance	79
Table 17 List of respondents	80

List of Photos

Photo 1 Project team updating on implementation and progress	17
Photo 2 Evaluation Team Presenting evaluation methodology and Plan	17
Photo 3 Focus group interview with park staff.....	17
Photo 4 Focus group Interview with local people	17
Photo 5 The Evaluation team visited project villages	17
Photo 6 Workshop on biodiversity conservation for DONRE, DARD, DOST staff	28
Photo 7 Training course for biodiversity of forest ecosystem.....	28
Photo 8 Training course for district/commune level officials on climate change and social impacts ...	28
Photo 9 Training course for local people to adapt to climate change and social impacts.....	28
Photo 10 Participants in Community Tourism Skill Training	28
Photo 11 Training for local people on planting techniques, maintenance, sustainable and clean agricultural production	28
Photo 12 Artificial water hole created for animals at the Nui Tuong grassland.....	31
Photo 13 Evaluation team visited Nui Tuong grassland.....	31
Photo 14 Crocodile Lake before habitat improvement	31
Photo 15 Crocodile Lake after removing floating vegetation.....	31
Photo 16 Local people planted high-value trees provided by the project.....	31
Photo 17 Villagers harvesting the grass from their grazing pastureland.....	31
Photo 18 Orchids collected from the wild and planted at CTNP Headquarters for gene conservation	37
Photo 19 Evaluation team visited the orchid house	37
Photo 20 Flowers of Camellia capitata in the wild of Cat Tien National Park	37
Photo 21 Flower of Camellia capitata in the wild of Cat Tien National Park	37
Photo 22 Seven New Orchid Species Discovered in CTNP.....	38
Photo 23 Focus group interview with the communities of Village 7	39
Photo 24 Training for local tour guides.....	39
Photo 25 Training for local tour guides.....	39
Photo 26 Wildlife species monitoring training.....	39
Photo 27 Training for homestay management	39
Photo 28 Focus group interview with the communities of Village 7	40
Photo 29 Focus group interview with the communities of Village 7	40

Executive Summary

1. Introduction

The mid-term evaluation report provides a comprehensive assessment of the "Conservation and Development of Forest Ecosystems Biodiversity Resources at Cat Tien National Park, Viet Nam (AFoCO/024/2021)" project, with a focus on its adherence to the OECD/DAC evaluation criteria. This report aims to evaluate the project's progress, relevance, effectiveness, efficiency, sustainability, and coherence, offering insights into its impact on the target community and region.

2. Evaluation Scope and Methodology

The report details the evaluation's scope and methodology, outlining the research approaches, data collection methods, and the criteria used to assess the project. It emphasizes the use of questionnaire surveys, interviews, and focus group discussions involving villagers, park staff, and the project team to gather comprehensive insights. Details of the evaluation team members along with the Term of Reference and limitation to the Mid-term Evaluation findings are also reflected in this section.

3. Outline of the Project

This section provides an overview of Cat Tien National Park in Vietnam highlighting the three the project site. It also presents the scenarios of the local people living in the buffer areas of the CTNP. Some of the common issues and challenges faced by the management of CTNP are also briefly discussed so as to highlight the importance of the project in enhancing biodiversity conservation, sustainable livelihoods, and community development in the buffer zones of the park.

4. Evaluation Results

The report evaluates the project's accomplishments, focusing on the completion of activities, outputs, and outcomes. It highlights the major progress made in biodiversity conservation, capacity building, habitat improvement, and control of invasive species within the park.

4.1 Summary of the survey results

The report presents the findings of questionnaire surveys conducted with three key stakeholder groups: villagers, park staff, and the project team. A questionnaire survey based on the OECD evaluation criteria was provided to the stakeholders and analysis of their responses provided valuable insights into the project's relevance, effectiveness, efficiency, impact, sustainability, and coherence.

4.2. Key Findings by evaluation criteria

This section summarizes the key findings and observations drawn by the evaluation team based on the site visit and focused group interview with the three key stakeholders. Findings under six different criteria used are provided in detail. Following are the summaries of the key findings under the respective criteria:

Relevance: The project exhibits high relevance at both the institutional and community levels, with a strong alignment to the needs and priorities of stakeholders. It remains in line with the goals of donors, partners, and beneficiaries and is consistent with national policies, AFoCO's vision, and the requirements of local communities in the buffer zone.

Effectiveness: The project has shown good progress in achieving its objectives, with a substantial number of activities completed. However, some delays were attributed to factors like the COVID-19 outbreak, cost discrepancies, long bidding processes, and limited experience in project management. Nevertheless, the project has made substantial progress in biodiversity conservation, capacity building, habitat improvement, and control of invasive species.

Efficiency: The project has achieved significant physical progress while maintaining relatively low financial expenditure, indicating a successful project in this regard. However, opportunities to optimize resource allocation and streamline processes have been identified, especially related to unrealistic cost estimates and the need for a new procurement.

Impact: While it's too early to assess long-term impacts, preliminary data and stakeholder feedback suggest a positive trajectory. Beneficiaries express satisfaction and anticipate lasting benefits, with a focus on increased jobs, income, and support for livelihood improvement. The project has positively influenced the livelihoods of communities in the buffer zone and contributed to conservation efforts in Cat Tien National Park.

Sustainability: The project has proactively taken measures to ensure its sustainability post-completion. Stakeholder engagement, capacity-building efforts, and support from existing policies and laws in Vietnam contribute to the potential sustainability of the project. The establishment of a village livelihood fund and close coordination among stakeholders are also seen as supportive factors. To further enhance the project's sustainability, recommendations include the incorporation of gender mainstreaming and Environmental and Social Safeguards.

Coherence: The project demonstrates a high level of coherence with its objectives, internal consistency, and alignment with stakeholder interests. It effectively integrates biodiversity conservation and livelihood improvement measures and aligns with broader development goals, ensuring a well-coordinated and consistent approach.

4.3 Best Practices and Lessons Learned

The mid-term evaluation report has identified three best practices and valuable lessons from implementing this project which include 1. Valuable Discoveries from Intensive Monitoring and Research; 2. Customized Capacity-Building Initiatives and 3. Building Conservation Partnerships through Livelihood Support. These best practices demonstrate the positive impact of the project on biodiversity conservation and sustainable livelihoods, offering valuable insights for future projects.

5. Conclusion

The report concludes with a reaffirmation of the project's importance and its potential for making a lasting impact. The project demonstrates strong alignment with its objectives, effectiveness in achieving outcomes, and positive sustainability efforts, as indicated by favorable stakeholder feedback. Notably, there are areas for improvement in resource allocation efficiency and safeguarding practices. These recommendations aim to improve project management and compliance with AFoCO's values.

6. Recommendations

The report also provides a set of recommendations aimed at enhancing project efficiency, financial management, and the realization of project objectives. These recommendations encompass areas such as communication, financial review, adjustment of project indicators, and reinvestment of project savings for impactful activities, which will be continuously followed up in the form part of the agenda of the Project Steering Committee Meetings.

Abbreviation & Acronyms

AFoCO	Asian Forest Cooperation Organization
CBT	Community-Based Tourism
CPC	Commune People's Committee
CTNP	Cat Tien National Park
DAC	Development Assistance Committee
DARD	Department of Agriculture and Rural Development
DONRE	Department of Natural Resources and Environment
DOST	Department of Science and Technology
ESS	Environmental Security System
HH	Household
IA	Implementing Agency
M&E	Monitoring and Evaluation
NPs	National Parks
NRs	Nature Reserves
NTFPs	Non-timber Forest Products
OECD	Organization for Economic Co-operation and Development
OVI	Objectively Verifiable Indicators
OVI	Objectively Verifiable Indicators
PIP	Project Implementation Plan
PMU	Project Management Unit
PRA	Participatory Rapid Appraisal
PSC	Project Steering Committee
RoD	Record of Discussion
SDGs	Sustainable Development Goals
ToR	Terms of Reference
TWPA	Total Weighted Physical Achievement
TWPT	Total Weighted Physical Target
UNESCO	United Nations Educational, Scientific and Cultural Organization
VLF	Village Livelihood Fund

1. Introduction

Development projects are dynamic, continuously evolving endeavors. As they progress, new challenges and opportunities emerge, necessitating a thorough review of strategies and interventions. Evaluations serve as transparency mechanisms, showcasing how resources are utilized and what results are achieved. This builds trust among stakeholders. Insights from evaluations help AFoCO make informed decisions on resource allocation, scaling successful interventions, and discontinuing ineffective ones. Ultimately, this approach optimizes resource utilization and maximizes project impact.

Among the evaluation processes, the mid-term evaluation is a timely opportunity to assess progress, identify areas for improvement, and gather insights to enhance the project's impact during the remaining duration. This mid-term evaluation marks a crucial phase in project assessment, aligning with AFoCO's commitment to excellence and efficiency in its projects.

The mid-term evaluation, titled "*Conservation and Development of Forest Ecosystems Biodiversity Resources at Cat Tien National Park (AFoCO/024/2021)*," is a critical assessment of ongoing project activities. Its primary purpose is to refine project design and performance, ensuring that planned activities align with the project's objectives and outcomes. Following the principles of result-based monitoring and evaluation, this mid-term assessment confirms that the achieved outputs are indeed leading towards the project's goals.

The evaluation report aims to achieve the following objectives:

- Assess the extent to which the project has achieved its stated objectives and outcomes.
- Evaluate the project's relevance, effectiveness, efficiency, impact, sustainability, and coherence.
- Identify strengths, weaknesses, challenges, and lessons learned during the project implementation.
- Provide recommendations for improving project performance and achieving desired results.

Based on the evaluation findings, the mid-term evaluation may recommend significant adjustments to enhance project performance. These recommendations can take various forms, including:

- **Adjusting Outputs:** We may suggest adding new project outputs or removing ones that no longer align with project goals.
- **Activity Revisions:** Some project activities may need to be revised to adapt to changing circumstances, ensuring their effectiveness.
- **Budget Reallocation:** Reallocation of the budget among project activities may be proposed to optimize resource utilization.

These recommendations will undergo follow-up discussions during project steering committee meetings, ensuring their successful implementation throughout the project's lifecycle.

It may be still *green* but if there are activities showing *green* lights for adopting as successful cases, the evaluation team tried to capture them as 'Best practices', which will be expected to provide some prior evidence and interesting topics to the final evaluation team for explorations further.

2. Evaluation Scope and Methodology

2.1. Evaluation scope

The mid-term evaluation of this project adhered to AFoCO's Monitoring and Evaluation Guidelines, ensuring a well-structured approach. Following OECD/DAC evaluation criteria, the assessment covered project performance, relevance, effectiveness, efficiency, coherence, sustainability, and impact (Figure 1). The evaluation employed a robust methodology to comprehensively assess the project's performance and impact across these six key criteria. This structured approach served as the foundation for a thorough analysis, providing valuable insights into the project's effectiveness, efficiency, relevance, coherence, sustainability, and overall development impact.



Figure 1 Outlines the six criteria and their related questions as adopted from the OECD/DAC

2.2. Evaluation methodology

The evaluation process was designed to be comprehensive, transparent, and evidence-based, utilizing qualitative and quantitative methods. The following outlines the key steps and methods employed in the mid-term evaluation of this project:

2.2.1. Inception and Planning

The evaluation process began with a thorough inception and planning phase. The evaluation team collaborated with the implementing agency to establish the evaluation scope, objectives, and key research questions. The team designed an evaluation plan that aligns with the AFoCO's Project Manual and incorporates the OECD/DAC evaluation criteria. The evaluation plan served as the blueprint for data collection, analysis, and reporting.

2.2.2. Data Collection

Various methods for data collection were employed to gather relevant information. These methods included the following:

- *Desk Review of the Project Documents*

The evaluation team carried out a detailed desk review of the project documents to gain insight into the project's approach and methodology and also to gain an understanding of the work plan, budget, objectives, outputs, and outcomes of the project. Further, a comprehensive review of the semi-annual and annual progress reports, Monitoring reports, and the Record of Discussion (RoD) of the Project

Steering Committee (PSC) meetings was carried out to understand the status of the project in terms of its physical and financial performances so far.

- *Questionnaire Survey of the Relevant Stakeholders*

Stakeholder mapping was carried out to identify relevant stakeholders who would be identified to participate in the survey. Accordingly, three different groups, viz. Project Staff, Cat Tien National Park staff, and local people from the project site were identified. Questionnaires were developed based on the AFoCO M&E Guidelines, employing the six OECD/DAC evaluation criteria, namely relevancy, effectiveness, efficiency, impact, sustainability, and coherence. Further, questions were developed separately for each stakeholder group but within the purview of the six criteria.

The score system provided in Table 1 is applied for this evaluation. A score of 3.1 or higher is considered good performing while a score of 3.0 or below could be viewed as having an issue and is subjected to further review and confirmation.

Table 1 The score system applied in the evaluation.

Score	Level of Performance	Level of Satisfaction
4.1~5.0	Very Good Performance	Very High
3.1~4.0	Good Performance	High
2.1~3.0	Satisfactory Performance	Satisfactory
1.1~2.0	Limited Performance	Low
0.1~1.0	Poor Performance	Very Low

- *Focused Group Interview*

Interviews with members from all three different stakeholders, viz. villagers from the three villages identified as project beneficiaries, staff of the Cat Tien National Park, and members of the Project Management Unit (PMU), were conducted during the field validation visit to understand how the relevant stakeholders have benefited from the project interventions. These interactions provided qualitative insights into perceptions, experiences, challenges, and opportunities related to the project.

- *Field Visits*

On-site visits to project locations were carried out from 31st July 2023 to 4th August 2023 (Table 2). The visit was mainly undertaken to allow the evaluation team to observe project activities, interact with local communities, and assess the project's tangible progress and impact. The validation exercise was completed with an exit meeting with the members of the PMU.

Table 2. Schedule of the field visit from 31 July to 4 August 2023

Date	Main activities
31/7/2023	<ul style="list-style-type: none"> • Park's van pick up at the hotel and go straight to Cat Tien National Park. • Meeting with Directorate of CTNP PSC, PMU updated the project activities from PSC 3 until now, achievements, and suggestions. (Confirmed)
01/8/2023	<ul style="list-style-type: none"> • Departure to <i>Camellia</i> plantation, orchid collection, and grassland (water reservoir). • Interview Project Management Unit, Park staff
02/8/2023	<ul style="list-style-type: none"> • Go field at Village 7 (Dac Lua commune, Tan Phu district, Dong Nai). Interview officers of Dac Lua commune and some households • Go field to Village 3 and Village 4 (Phuoc Cat 2 commune, Cat Tien district, Lam Dong province). Interview officers of Phuoc Cat 2 commune and some households
03/8/2023	<ul style="list-style-type: none"> • Departure to <i>Mimosa pigra</i> at Bird Lake. • Departure to Crocodile Lake, monitoring improvement of Crocodile Lake habitat.
04/8/2023	<ul style="list-style-type: none"> • Interview with a homestay household at Nam Cat Tien commune • Meeting with the PSC, PMU, Park staff to wrap up

2.2.3. Data Analysis and Synthesis

Both quantitative and qualitative analyses were conducted to assess the project's achievements. Quantitative data, including project outputs and indicators, were evaluated using the Project Implementation Plan (PIP) matrix¹ and the Project's Log Frame in Project Document (**Annex I**).

Qualitative data obtained from interviews and surveys were thematically analyzed to uncover valuable insights and trends. All data and information were systematically analyzed within the framework of the OECD/DAC evaluation criteria, covering project progress, relevance, effectiveness, efficiency, impact, sustainability, and coherence. A detailed breakdown of evaluation methodology is indicated in Table 3, whose specific details and checkpoints related to our evaluation process are displayed in Table 4.

Table 3 Evaluation portfolio

Method Evaluation criteria	Document analysis	Data and statistics analysis	Interview with the local people and beneficiaries	Interview with the project stakeholders & implementers	Questionnaire survey of target groups	On-site field trip and survey
Relevance	✓	✓	✓	✓	✓	✓
Effectiveness	✓	✓	✓	✓	✓	✓
Efficiency	✓	✓	✓	✓	✓	✓
Impact		✓	✓	✓	✓	✓
Sustainability			✓	✓	✓	✓
Coherence			✓	✓	✓	

Table 4 Evaluation matrix

Evaluation criteria	Scope	Indicator/checkpoints	Research Method
Relevance	Degree of the objectives of development projects satisfying the needs and priorities of beneficiaries and policies of donors and recipients	To check if the Project remains to be relevant based on the priorities and policies of the target group, recipient and donor	<ul style="list-style-type: none"> • Document analysis • Data and statistics analysis • Interview with the local people and beneficiaries • Interview with the project stakeholders and implementers • Questionnaire survey of targeting group • On-site field trip and survey
Effectiveness	Degree of the objectives of projects achieved	To measure the extent to which an aid activity attains its objectives	<ul style="list-style-type: none"> • Document analysis • Data and statistics analysis • Interview with the local people and beneficiaries • Interview with the project stakeholders and implementers • Questionnaire survey of targeting group • On-site field trip and survey

¹ For AFoCO-funded projects, the Project Implementation Plan (PIP) Matrix is used to provide regular and timely monitoring of project implementation based on the objectively verifiable Indicators (OVIs) and to identify corrective actions required for effective and efficient implementation of the project. OVIs are set out for project activities to verify the activities under outputs, and the performance indicators are developed to measure the OVIs quantitatively. Based on these, criteria weight (CW) is generated as the ratio of the budget component of activity to the total project budget and provided for calculating the Total Weighted Physical Target (TWPT) and Total Weighted Physical Accomplishment (TWPA).

Efficiency	Degree to which the costs of development projects can be rationalized against alternatives. In other words, the degree of several inputs economically used and turned into outputs and results	<p>To measure the outputs – qualitative and quantitative – in relation to the inputs.</p> <p>It is an economic term used to assess the extent to which aid uses the least costly resources possible to achieve the desired results.</p> <p>This generally requires comparing alternative approaches to achieving the same outputs, to see whether the most efficient process has been adopted.</p>	<ul style="list-style-type: none"> • Document analysis • Data and statistics analysis • Interview with the local people and beneficiaries • Interview with the project stakeholders and implementers • Questionnaire survey of targeting group • On-site field trip and survey
Impact	Overall results of the positive, negative, intended, or unintended effects of development projects	<p>To see the positive and negative changes produced by a development intervention, directly or indirectly, intended or unintended.</p> <p>To see impacts and effects resulting from the activity on the local social, economic, environmental, and other development indicators.</p> <p>To find out external factors deriving unintended results and providing the positive and negative impact</p>	<ul style="list-style-type: none"> • Data and statistics analysis • Interview with the local people and beneficiaries • Interview with the project stakeholders and implementers • Questionnaire survey of targeting group • On-site field trip and survey
Sustainability	Possibility of a positive, long-lasting effect after implementing an evaluation object policy or completing an evaluation object project	<p>To measure whether the benefits of an activity are likely to continue after donor funding has been withdrawn.</p> <p>To foresee environmental as well as financial sustainability</p>	<ul style="list-style-type: none"> • Interview with the local people and beneficiaries • Interview with the project stakeholders and implementers • Questionnaire survey of targeting group • On-site field trip and survey
Coherence	Degree of coordination and consistency between the project and other development interventions, both within the donor agency and among different actors involved in development cooperation.	To explore if the project is part of a larger coherent framework and avoids duplication or contradiction.	<ul style="list-style-type: none"> • Interview with the local people and beneficiaries • Interview with the project stakeholders and implementers • Questionnaire survey of targeting group

2.3. Terms of reference for the evaluation team

The mid-term evaluation assessed the progress, relevance, effectiveness, efficiency, and impact of the project thus far and shall provide recommendations for the remaining project implementation. The following are the Terms of Reference (ToR) of the Evaluation Team:

1. Project Evaluation Coordination
 - a. Lead and coordinate the AFoCO Project AFoCO/024/2021 mid-term evaluation.
 - b. Develop a meticulous evaluation plan involving both quantitative and qualitative methodologies, adhering to six key criteria: relevance, effectiveness, efficiency, impact sustainability, and coherence.
2. Project Analysis and Stakeholder Engagement
 - a. Review essential project documents and evaluate the on-site achievements according to the AFoCO M&E Guidelines.
 - b. Facilitate orientation and exit meetings with the Implementing Agency and other stakeholders to evaluate project progress and identify areas for improvement.
3. Data Collection and Analysis
 - a. Assess how well the project aligns with the initial proposal, the logical framework, and anticipated outcomes.
 - b. Gather supplementary materials such as photos, videos, and maps to support the evaluation.
4. Documentation and Submission
 - a. Identify best practices and lessons learned during the project.
 - b. Compile a comprehensive evaluation report, presenting findings, conclusions, and recommendations.
 - c. Complete and submit the evaluation report to both the Secretariat and the Assembly, and archive all pertinent data in the AFoCO's database.

By adhering to the above ToR, the evaluation team conducted a comprehensive mid-term evaluation, providing valuable insights and recommendations for optimizing the project's impact and success.

2.4 Limitations of the report

The Project mid-term evaluation is a valuable tool for assessing a project's progress, identifying challenges, and making necessary adjustments. Despite its utility, this evaluative approach harbors certain constraints, delineated as follows:

Limited Sample Plot: Although stakeholder mapping was carried out to identify the different groups of stakeholders involved in the project, the sample size of participants in the survey and interview process may not be large enough to represent the entire project's target population or all stakeholders. This could lead to a lack of diversity and potential bias in the findings, resulting in missing important perspectives and insights.

Selection Bias: Participants who respond to surveys or participate in interviews may not fully represent the entire project population. They might have different motivations or perspectives, and there always remains a risk that the informant's response would be biased towards portraying an overly positive view of the impacts that project interventions had on the villages as they would be hesitant to criticize or convey grievances if they had any.

Social Desirability Bias: Respondents may provide answers they believe are socially acceptable or expected rather than expressing their true opinions or experiences. This bias could impact the accuracy and reliability of the data collected.

Effective Communication: Considering that the questionnaire had to be translated into Vietnamese for the participants and the responses had to be translated back into English for the evaluation by the team,

there is always some risk that the meaning of the questions may have been altered while translating into Vietnamese, and similarly, the response for the questions could also be altered during the translation into English.

Time Constraints: The mid-term evaluation may be constrained by time limitations, which could affect the depth and breadth of data collection and analysis. It may result in a less comprehensive understanding of the project's status.



Photo 1 Project team updating on implementation and progress



Photo 2 Evaluation Team Presenting evaluation methodology and Plan



Photo 3 Focus group interview with park staff



Photo 4 Focus group Interview with local people



Photo 5 The Evaluation team visited project villages

3. Project Outline

Cat Tien National Park (CTNP) is a renowned protected area in southern Viet Nam, spanning three provinces: Dong Nai, Lam Dong, and Binh Phuoc (Figure 2). It covers approximately 82,597.3 hectares and is recognized as one of the country's most significant nature reserves. The park is known for its exceptional biodiversity, housing endangered and rare species of flora and fauna.

The project AFoCO/024/2021 addresses persistent challenges in biodiversity conservation, with a specific focus on strengthening cooperation between CTNP and local authorities. Over time, lack of capacities of the local stakeholders has hindered the park's sustainable management. The project's objectives include enhancing CTNP's conservation capacity, improving the livelihoods of local communities, and building resilience and capabilities in the region.

Project Objectives and Investment Leverage

The project's overarching goals are to enhance CTNP's conservation capacity, improve the livelihoods of local communities, and build their capacities and resilience. It seeks to achieve three primary objectives with 18 outputs in a five-year time frame (Table 5). The below identifies how the project puts its priority to achieve the goals by investment amount:

- **Enhanced Knowledge Sharing** (\$40,000 investment): Improve knowledge and information sharing on the park's biodiversity among local managers and policymakers (2 outputs).
- **Climate Change and Conservation** (\$500,000 investment): Assess climate change and social impacts on CTNP biodiversity, implement integrated management measures, enhance management and conservation capacities of project stakeholders, and engage local communities in forest management and protection (11 outputs).
- **Sustainable Livelihoods** (\$270,000 investment): Pilot models for sustainable livelihood improvement in the buffer zones (5 outputs).

Within the second objective with the largest investment amounting to \$500,000, substantial budget allocation is focused on specific outputs, including:

- Implementing Climate Change Measures (Output #5, \$120,000): Implement measures and solutions to minimize negative impacts of climate change and social impacts at CTNP.
- Organizing Biodiversity Monitoring Trainings (Output #10, \$100,000): Organizing trainings on forest protection skills associated with biodiversity monitoring.
- Supporting Tree Crop Planting and Marketing (Output #16, \$110,000): Support the planting, maintenance and marketing of high value tree crops to help improve the livelihoods of ethnic minorities.
- Developing Homestay Models (Output #18, \$110,000): Develop and promote homestay model in Nam Cat Tien commune, in accordance with local customs and practices as a tourism-based alternative livelihood

In line with its large amount of funds towards training, research activities, and trial-based livelihood improvement activities, this project is designed to make a significant impact on CTNP's conservation and development efforts to mitigate negative factors that reduce biodiversity, such as the low level of awareness and compliance with forest protection regulations among local populations, especially ethnic minorities living in the buffer zones. It also addresses issues of low incomes and unstable jobs within these communities. Furthermore, it tackles challenges related to climate change and social impacts, including the invasion of exotic plants like *Mimosa pigra* and floating vegetation in park wetlands.

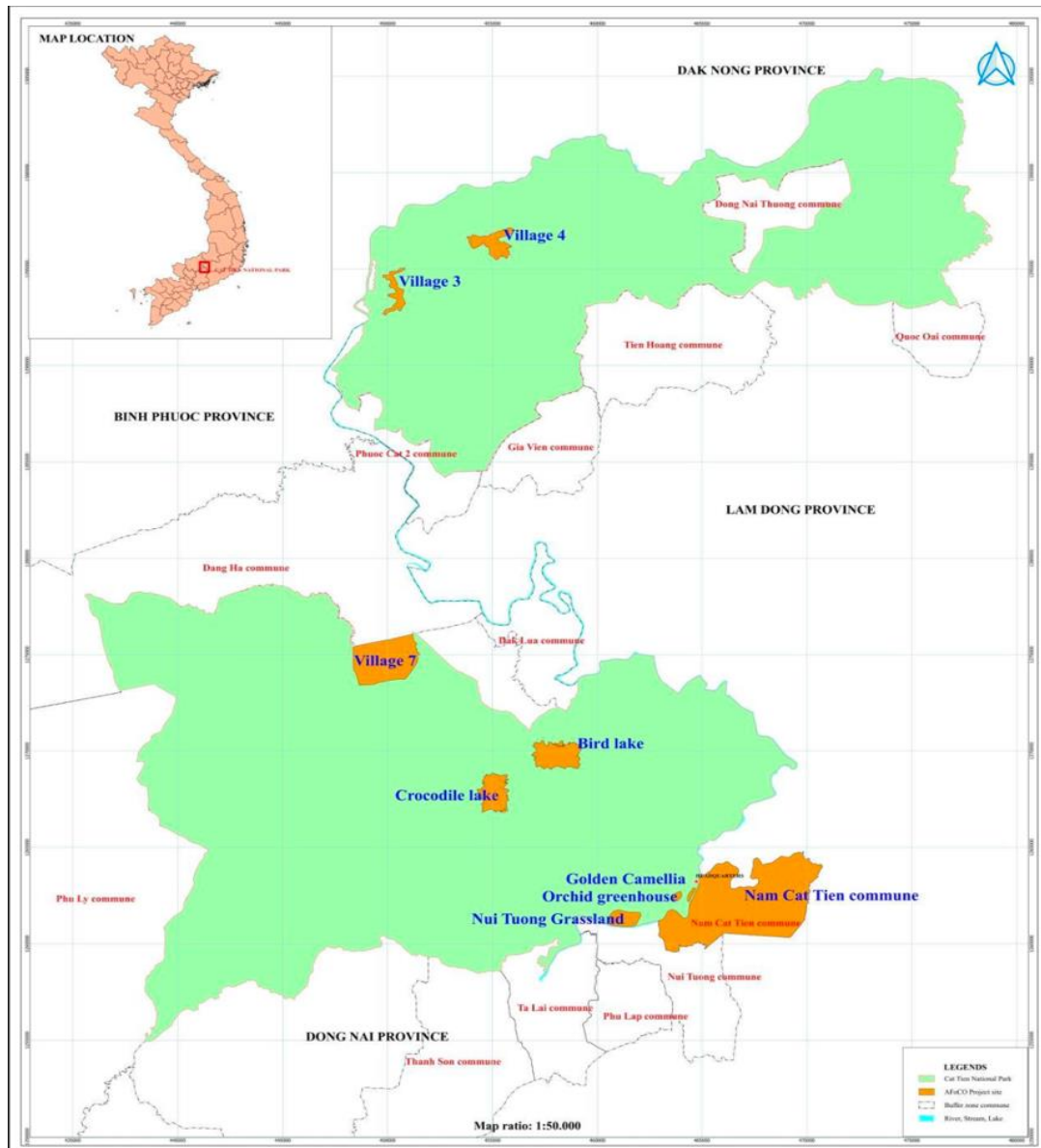


Figure 2 Cat Tien National Park (green color) showing the project sites (orange color)

Table 5. Project outputs and each OVIs

Output	Narrative	Objectively Verifiable Indicators (OVI)
Overall objective To improve the conservation and development of forest ecosystems biodiversity resources at CTNP engaged with sustainable livelihood improvement for communities in the buffer zone.		
Objective 1 To improve knowledge and information sharing on biodiversity of forest ecosystems of the Park for local managers and policy makers		
1	Training, sharing knowledge, experiences and skills on biodiversity conservation to the Province, District, Commune Officers	At least 80 provincial officers from the DONRE, DARD, DOST of Dong Nai, Lam Dong, Binh Phuoc provinces and 80% of district and commune leaders in the buffer zone have participated in the training courses on biodiversity conservation
2	Study tour in national parks and protected areas inbound and outbound	A study tour to NPs and NRs inbound has been organized with the participation of 15 people.
Objective 2 To assess the climate change and social impacts on CTNP biodiversity and integrated management measures, improve management and conservation capacities of project stakeholders, and to engage local communities for forest management and protection		
3	Assess the climate change and social impacts to the biodiversity of CTNP	An assessment report on current status of climate change and social impacts on CTNP biodiversity in recent 5 years has been produced.
4	Organize training on climate change and social impacts for people and local authorities in the buffer zone	Based on a set of developed training documents, 5 training courses on climate change and social impacts for local authorities and people in the buffer zone have been organized every year with the participation of 30 trainees per course.
5	Implement measures and solutions to minimize negative impacts of climate change and social impacts at Cat Tien National Park (i.e. improving the habitat of Ramsar-Crocodile Lake and neighboring wetland).	Measures and solutions to minimize the negative impacts of climate change and social impacts to CTNP have been implemented every year.
6	Enhance local communities' capacity to adapt with climate change and social impacts (i.e. changing cultivation methods, and practices for local people in buffer zone to adapt to climate change)	Based on a set of developed training documents, two training courses for local communities with the participation of at least 80 households on adaptation of climate change and social impacts have been organized in 2022 and 2023.
7	Develop a model of planting Golden Camellia (<i>Camellia spp.</i>)	A 5-ha model of planting Golden Camellia in Nui Tuong with a plantation of 1.200 trees (240 trees per ha) has been developed and maintained annually.
8	Collect orchids (Orchidaceous) and set up a greenhouse for orchid genus resource conservation at CTNP.	At least 50 local orchid species have been collected and a greenhouse for orchid genus resource conservation at CTNP has been set up and maintained
9	Develop supporting documents, materials, and tools to improve conservation capacity.	Supporting documents, materials, and tools to improve conservation capacity have been developed, published, and circulated to stakeholders in 2022.

10	Organize training on forest protection skills associated with biodiversity monitoring, focusing on water birds, Phasianidae, Hornbills, large mammals, and small carnivores. Monitor some rare species by remote sensing technology by consultants, and monitor key species by CTNP	Two training courses on forest protection skills associated with biodiversity monitoring have been organized in 2021. At least 5 key species, focusing on water birds, Phasianidae, Hornbills, large mammals, and small carnivores, have been monitored yearly using remote sensing technology.
11	Organize training on forest patrolling, use of patrol equipment (maps, compass, GPS). Develop plans and methods for patrolling, skills of communication and education, management of violators in the community. The participants would be Park's rangers and scientific staff.	Four (4) training courses on forest patrolling and protection, skills of using equipment for rangers have been organized in 2021 and 2022.
12	Develop coordination regulations on forest protection with local authorities, sign commitments on forest protection with households (without community forest protection committee establishment)	By 2021, coordination regulations on forest protection have been developed and 100% of communes (32 communes) at the buffer zone have signed forest coordination regulations with the park and at least 70% of households in communes have signed commitments on forest protection.
13	Study tours and workshop inbound and outbound to NPs, NRs Participants would be the Park's staff and Leaders of communes, districts.	By 2025, through a number of study tours to NPs, NRs inbound and outbound, an assessment report on economic development potential engaged with biodiversity conservation has been produced.
Objective 3 To conduct piloting of models for sustainable livelihood improvement of communities in the buffer zone		
14	Survey and assess the benefits and potentials of economic development in the future of the Park and local community	In 2023, a report on surveying and assessing the benefits and potentials of economic development in the future of the Park and local community has been produced.
15	Identify economic benefits of biodiversity conservation engaged with improving livelihoods for local people in the buffer zone. Participants would be community members. They would participate the workshops, meetings for decision making (both of planning and implementing)	A report on identification of economic benefits of biodiversity conservation engaged with improving livelihoods for local people in the buffer zone has been produced in 2022.
16	Support the planting, maintenance and marketing of high-value tree crops (cashew-nut, durian, avocado) to help improve the livelihoods of ethnic minorities in Village 3 and Village 4 of Phuoc Cat 2 commune	20 ha of high-value trees (cashew-nut, durian, avocado) have been supported to help improve livelihoods of at least 50 households of ethnic minorities in Village 3 and Village 4 of Phuoc Cat 2 Commune.
17	Plan and establish intensive grazing pastures management for ethnic minority in Village 7, Dac Lua commune, Tan Phu district, Dong Nai province	At least 5 ha of intensive grazing pastures has been set up and managed in Village 7, Dac Lua Commune, Tan Phu District, Dong Nai province.
18	Develop and promote homestay model in Nam Cat Tien commune, Tan Phu district, Dong Nai province in accordance with local customs and practices as a tourism-based alternative livelihood	A successful homestay model in Nam Cat Tien commune, Tan Phu district, Dong Nai province in accordance with local customs and practices as a tourism-based alternative livelihood has been developed and duplicated to other potential communes.

4. Evaluation Results

4.1 Summary of the survey results

After an initial document review, questionnaires were developed and distributed to three key stakeholder groups involved in the project: villagers, park staff, and project team members. A total of 63 villagers, 19 park staff, and 6 project staff members participated in the questionnaire survey. The questionnaires consisted of both rating and open-ended questions. Park and project staff were asked to evaluate the project based on all six evaluation criteria, while villagers were focused on the criteria of relevance, effectiveness, impact, and sustainability. Detailed survey results and lists of respondents for each stakeholder group can be found in **Annex IV**, **Annex V**, and **Annex VI**.

The overall results of the rating based on the data analysis are provided in Table 6. The average score for the overall project achievement perceived by all three stakeholder groups is **4.1** out of 5.0, whereas that for the respective criterion is between 4.0 and 4.3.

Table 6 Average scores provided by the three stakeholders against the six evaluation criteria²

Sr.	Criteria	Average	Project Team	Park Staff	Villager
	Average	4.1	4.2	4.1	4.0
1	Relevance	4.0	4.3	4.1	<u>3.5</u>
2	Effectiveness	4.2	<u>3.8</u>	4.3	4.4
3	Efficiency	4.0	4.1	<u>3.8</u>	NA
4	Impact	4.0	4.2	4.1	<u>3.8</u>
5	Sustainability	4.1	4.2	<u>3.8</u>	4.3
6	Coherence	4.3	4.4	4.2	NA

(Note: NA= Not Available. Two criteria - efficiency and coherence - were not assessed by villagers with the assumption that the villagers might not have adequate information on project funds, expenditures and similar projects or activities.)

In terms of **relevance** criterion, the data analysis indicates the perceived scores for relevance were very high for project staff (4.3/5.0) and park staff (4.1/5.0) and high for villagers (3.5/5.0). The average perceived score for all three stakeholder groups is 4.0 and thus the relevance of the project was viewed high by the stakeholders. Project staff perceived that the project is relevant to national/ provincial policy/plan/program, to the need of the park, and to the better engagement of local people in forest resource protection and management. Similarly, park staff viewed that the project is aligned with enhancing the conservation efforts and building the capacities of the park staff and relevant stakeholders.

For the **effectiveness** criterion, the average score for the three stakeholder groups was even higher, 4.2 out of 5.0. The villagers and park staff gave very high scores of 4.4 and 4.3 out of 5.0 respectively while the project staff gave only a high score of 3.8 out of 5.0. The higher scores from the park staff and villagers could be based only on the activities they were involved in, while the project staff could have considered all the activities in the project including the ongoing and the delayed project activities.

Regarding the **efficiency** criterion, questions were only asked to the project staff and park staff. The project staff gave a very high score of 4.1 out of 5.0 while the park staff gave a high score of 3.8 out of

² Using the scoring system outlined in Table 1, a score of 3.1 or higher indicates good performance, while a score of 3.0 or below suggests potential issues that require further review and confirmation.

5.0. Park staff perceived there can be room for improvement for the project to be very efficient.

The average score for the **impact** criterion for all three stakeholder groups was 4.0 out of 5.0 indicating that the project has brought positive impacts on all three stakeholder groups mainly in terms of capacity building of park staff and villagers, habitat improvement, and livelihood improvement for local people.

For the **sustainability** of the project and its activities, a very high average score of 4.1 out of 5.0 was received. The villagers gave the highest score of 4.3 out of 5.0 for the sustainability criterion followed by the project staff who gave 4.2 out of 5.0, while the park staff gave only a high score of 3.8 out of 5.0. The lower score given by the park staff could be based on the uncertainty of the availability of a budget for conducting activities like monitoring biodiversity, procurement of devices such as GPS and drones, and continuation of capacity-building programs in the future. Project staff were highly satisfied with the project approach or results and look forward to replicating or scaling up in other villages. The villagers were especially satisfied at a very high level for the continuous engagement with CTNP for forest protection and look forward to having their livelihood enhanced by the high-value trees and the grazing pasture supported by the project.

With regard to the **coherence** criterion, questions are only asked to project staff and park staff. Both of these stakeholders gave very high scores 4.4 and 4.2 respectively. They perceived that the project is in line with broader development goals, and strategies and well-coordinated with similar activities and projects.

4.2 Overall project performance by evaluation criteria

Alongside the responses received from the three stakeholder groups through questionnaire surveys, the evaluation team conducted in-depth validation and analysis. This encompassed on-site verification, focus group discussions, and interviews conducted to evaluate both the project and its activities at the institutional and community levels. A list of interview participants can be found in **Annex VII**, **Annex VIII**, and **Annex IX**. The following section provides comprehensive findings and evaluations of the project based on the respective evaluation criteria.

4.2.1 Relevance

The project aims to improve the conservation and development of the forest ecosystem's biodiversity resources at CTNP, engaged with sustainable livelihood improvement for communities in the buffer zone. The goal and objectives of the project remain unchanged, and the rationale of the project is still valid. Therefore, the evaluation team finds the project highly relevant to the priorities of donors, partners, and beneficiaries.

4.2.1.1 Relevance with the National Policy and AFoCO

The project's goal and objectives are in harmony with broader sustainable development goals (SDGs), particularly those related to climate action, biodiversity, poverty reduction, and more. Furthermore, the project is closely linked to Viet Nam's National Strategies and Goals, including the Viet Nam National Biodiversity Strategy to 2030 and the Viet Nam Forestry Development Strategy for 2021-2030.

The project also aligns with AFoCO's vision of fostering a greener Asia characterized by resilient forests, landscapes, and communities. This vision is pursued through strengthened collaboration in climate change adaptation and mitigation, sustainable forest management, livelihood enhancement programs, and research and development efforts in climate change adaptation and local livelihood improvement.

4.2.1.2 Alignment with project objectives

The project's main objectives, which involve enhancing knowledge sharing on forest biodiversity for

local managers and policymakers and testing sustainable livelihood models for buffer zone communities, are consistently integrated into its activities, strategies, and outcomes. This cohesive approach guarantees that all project endeavors significantly contribute to the desired objectives. It showcases a high level of coordination and coherence between the project itself, other development initiatives, and the broader goals, objectives, and strategies of both AFoCO and CTNP.

4.2.1.3 Relevance with the community requirements

According to CTNP (2023), there were more than 30,000 people in 22 communes in the buffer zone of CTNP. Local people have low and precarious incomes and unstable jobs. The project areas include Village 3, Village 4, Village 7, and Nam Cat Tien commune. Village 3 and village 4 are buffer zone villages located entirely in the core zone of CTNP. Village 7 has high numbers of cattle and limited grazing land. Local people face challenges due to climate change, low yield of crops, limited grazing land, and limited capacity for livelihood activities. In Nam Cat Tien commune, the tourism sector plays a part in local people's livelihoods. During the project's development phase, consultations were made with local people. Thus, project activities such as training on cultivation techniques, distribution of valuable fruit trees, training on ecotourism, and establishment and management of grazing pasture are suitable for the needs of local people.

The evaluation team noted that extensive stakeholder engagement processes have been implemented, leading to the inclusion of beneficiary voices and preferences in project planning and execution. This alignment has ensured that the project remains responsive to the expectations and requirements of the local communities it serves. During the focus group interview, the villagers expressed their deep appreciation towards the project and the management of CTNP, for coming up with appropriate livelihood interventions that were finalized based on the consultative meeting between the villagers and the management of CTNP.

4.2.2 Effectiveness

4.2.2.1 Analysis of Project Implementation Plan (PIP) Matrix³

The project comprises a total of 18 outputs, encompassing 67 activities. Cat Tien National Park has successfully concluded 41 of these activities (see **Annex II**). Currently, 21 activities are ongoing as planned, while three activities related to the establishment of greenhouses (H4, H5), marketing of high-value agricultural products (P3), and the homestay model (R5) are pending (refer to **Annex III**).

Several factors have contributed to the delay of certain project activities. These include the initial outbreak of COVID-19, discrepancies between budgeted costs and actual expenses, lengthy bidding procedures for construction, a lack of clarity regarding project manuals, and limited experience in implementing and managing certain project activities. The rest two activities proposed to be changed are activities on controlling *Mimosa pigra* at Bird Lake (E4) and developing survey about Golden Camellia (G5) (see Table 16).

According to the Project Implementation Plan (PIP) Matrix, the project has achieved an overall physical accomplishment of 68.3% as of the end of the first semester this year (S1-2023), the total weighted physical accomplishment (TWPA) of the project was 68.3% in S1-2023, around 6.6% less achievement than the total weighted physical target (TWPT). Yet, considering the nature of the project cycle in the middle of the year and the project period, the said gap was not a critical issue of implementation. Of the

³ For AFoCO-funded projects, the Project Implementation Plan (PIP) Matrix is used to provide regular and timely monitoring of project implementation based on the objectively verifiable Indicators (OVIs) and to identify corrective actions required for effective and efficient implementation of the project. OVIs are set out for project activities to verify the activities under outputs, and the performance indicators are developed to measure the OVIs quantitatively. Based on these, criteria weight (CW) is generated as the ratio of the budget component of activity to the total project budget and provided for calculating the Total Weighted Physical Target (TWPT) and Total Weighted Physical Accomplishment (TWPA).

18 outputs, 'Project Management' was identified as affecting the generation of the gap between TWPA and TWPT, due to delayed procurement (Table 10).

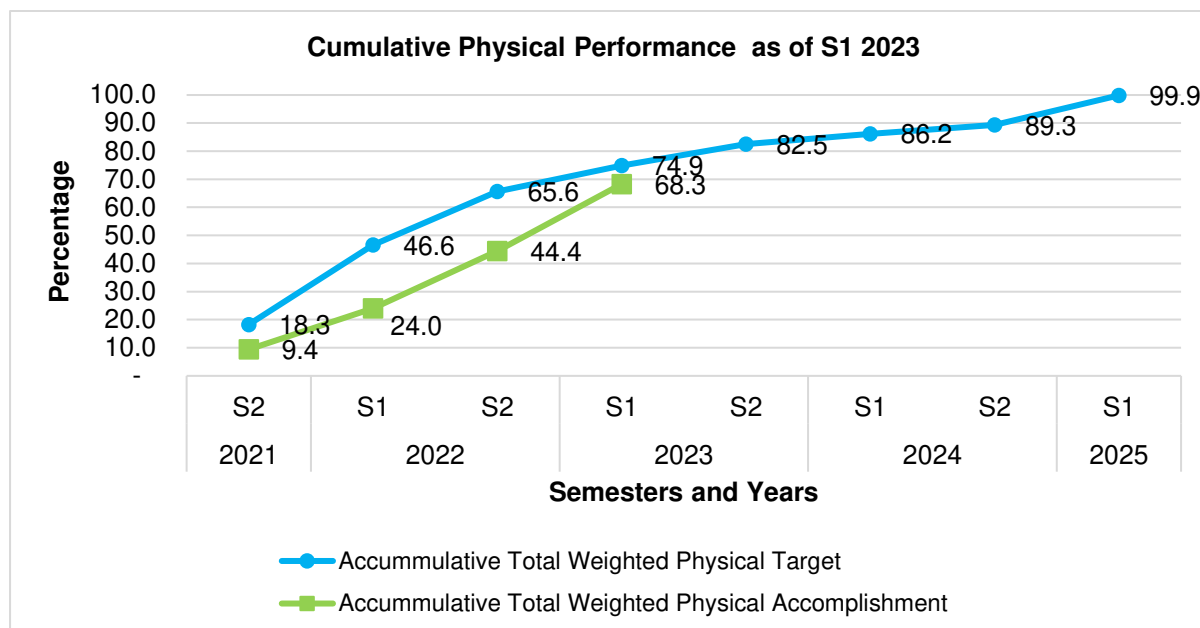


Figure 3 Cumulative physical performance of the project as of S1 2023

Table 7. Cumulative physical performance of each output as of S1 2023

Output No.	Overall Total Weighted Physical Target	Total Weighted Physical Target as of S1 2023	Total Weighted Physical Accomplishment as of S1 2023
Sum	99.9	74.9	68.3
1	2.0	2.0	2.0
2	2.0	2.0	2.0
3	2.0	1.7	1.0
4	2.0	1.4	2.0
5	11.9	5.6	5.9
6	4.9	4.9	4.9
7	4.9	2.9	3.2
8	5.9	5.6	4.6
9	2.0	1.7	1.1
10	9.9	7.7	8.1
11	2.0	2.0	2.0
12	2.0	1.7	1.7
13	2.0	2.0	1.3
14	1.0	1.0	1.0
15	2.0	2.0	2.0
16	10.9	8.9	10.9
17	2.0	2.0	2.0
18	10.9	6.3	6.2
Project Management	19.7	13.5	6.6

(Note: Details of outputs and project management are given in Annex I.)

4.2.2.2 Effectiveness of project intervention on biodiversity conservation

The project has developed and maintained a model Golden Camellia plantation of 5 ha with 1,200 trees (240 trees/ha). During the research survey by the park, five (5) different species (*Camellia dormoyana*, *C. luteocerata*, *C. cattienensis*, *C. capitata*, *C. sinensis*) of Golden Camellia were recorded in the CTNP and one species (*C. capitata*) was new record for the park. Related to the activity, the IAs proposed not to implement the product branding activity for Golden Camellia with the justification that the plantation is still young and products cannot be obtained during the project period. Therefore, IA urged that Golden Camellia plantation should only be managed for conservation.

About 80 species of wild orchids have been inventoried, and 70 species have already been identified. So far, 35 wild orchid species have been collected, and 298 plants have been grown for orchid gene conservation. However, building a greenhouse for orchid collection and conservation has been delayed due to the long bidding process. Through the project, monitoring of seven (7) key species, including (1) *Bos gaurus*, (2) *Rusa unicolor*, Primates (3) *Pygathrix nigripes*, (4) *Nomascus gabriellae*, Reptiles (5) *Crocodylus siamensis*, Aves - Phasianidae (6) *Pavo muticus*, (7) *Lophura diardi* have been carried out annually.

The project has achieved the establishment of a 5 ha grazing pasture in Village 7, which has the highest number of cattle, to address illegal grazing in the park and prevent conflicts between the park staff and villagers. Elephant grass planting and management techniques were introduced to the villagers. Based on an interview with villagers, they were satisfied with the grazing pasture establishment, which significantly reduced the need to send their cattle inside the park. Due to the poor quality of soil, the villagers have requested for the supply of fertilizers to improve the soil quality to enhance the productivity of the elephant grass from the grazing pasture land.

Habitant improvement activities such as artificial mineral sites, grassland management and maintenance of water ponds in Nui Tuong grassland were effective, and this led to an increase in the number of wild animal occurrences in the grassland.

The project also includes habitant improvement activities such as removing floating vegetation 5 ha/year from the Ramsar Crocodile Lake and controlling invasive *Mimosa pigra* (*M. pigra*; 5 ha/year) from the Bird Lake. Removing floating vegetation was only achieved at 2.5 ha/ year due to budget constraints, which was viewed as being a result of unrealistic cost estimation during the planning stage. The IA reported that removing floating vegetation was done using a tractor and manpower and indicated that using a crawler would be much more effective in terms of its coverage of controlling.

The invasive species *M. pigra* spreads across the lake (around 200 ha) at high density. The IA could only control 3 ha of the *M. pigra* from the bird lake in 2022. The growth of *M. pigra* was found to be faster after cutting, and the project team found the activity to be ineffective. However, a feasible solution to control the invasive species has not yet been found. During an interview with park staff, it was noted that the problem of the invasive species is not only confined to CTNP but occurs throughout Viet Nam.

4.2.2.3 Effectiveness of the capacity building program

The project has organized various workshops and a capacity-building program. Up to now, ten (10) workshops have been organized targeting the park staff and government officials (Table 11). Similarly, more than 10 training programs on various aspects like biodiversity conservation, forest patrolling, community-based tourism, climate change adaptation, and plantation techniques were conducted (Table 12). These trainings were attended by all the three stakeholder groups.

The main aim behind the conduct these programs was to improve knowledge on the biodiversity and forest ecosystem of the park for local policy makers and managers, to improve the capacities of project stakeholders and to engage local communities in sustainable forest management and support the sustainable livelihood of communities in the buffer zone. It was noted that these workshops and training programs has been of huge impact on the villagers and staff of the CTNP mainly in terms of enhancing

their capacities and increasing awareness, ultimately leading to the successful implementation of the project activities and achievement of project outcomes. Further, during the focus group interviews with park staff and villagers, more capacity-building programs were suggested: training for staff on law enforcement and regulation, operating drone and GPS, wildlife survey (Photo 1, 2, 3, 4, 5, and 6).

The project also organized three study tours (including one outbound tour and two inbound) to other national parks both within and outside Viet Nam to improve the knowledge and capacities of park staff, leaders of communes and districts, and project staff on biodiversity, climate change, social, and integrated management measures for biodiversity conservation.

Table 8 List of workshops organized by the Project

SN	Activity Code	Workshop Details	Total	Male	Female
		Total Participants	478	438	40
1	L 1	Workshop on Review and Updating Coordination Regulation for Forest Protection (Cooperation with Local Authorities & Commitment from Household)	50	50	0
2	1	Workshop for Signing the Coordination Regulation on Forest Protection	60	58	2
3	P 1	Consultation Workshop for Coordination of the Project Activity on Support of high-value trees to help improve livelihoods of ethnic minorities in Village 3& 4 Phuoc Cat 2 Commune	52	45	7
4	Q 1	Consultation Workshop to Identify the grazing pasture location and community participant in Village 7	31	28	3
5	J 2	Consultant workshop for developing the "Handbook of patrolling forest protection and wildlife monitoring in CTNP"	33	32	1
6	L 1	Consultation workshop on update coordination regulations on forest protection, contents of cooperation with local authorities and commitments of HH	50	50	0
7	L 2	Workshop on signing the Regulation on coordination in forest protection of CTNP	60	58	2
8	P 1	Using PRA methodology for identification of locations and participants and profiling (planting grasses and special trees)	77	68	9
9	Q 2	Consultation workshop for choosing to purchase the grasses varieties, set up and manage grazing pastures	31	28	3
10	O 2	Organize workshops on identifying the economic benefits of biodiversity conservation engaged with improving livelihoods for local people in the buffer zone	34	21	13

Table 9 List of training programs for communities conducted by the Project

SN	Activity Code	Training Details	Total	Male	Female
		Total Participants	810	515	295
1	J 3	Training on Investigation and Monitoring of Endangered Species	58	55	3
2	A 3	Training on biodiversity conservation knowledge for DONRE, DARD, DOST staff of 2 provinces of Dong Nai, Lam Dong, districts and communes in the buffer zone	72	48	24
3	D 3	Training on climate change and social impacts for local authorities and local people in Phuoc Cat 2, Dac Lua, Nam Cat Tien communes	173	89	84

4	F 3	Training on capacity building for local communities to adapt to climate change and social impacts	182	70	112
5	J 3	Training on forest protection skills associated with biodiversity monitoring, and forest protection patrolling skills for CTNP staff	60	57	3
6	K3	Training on forest patrolling and protection	76	75	1
7	K 4	Training on communication education skills, and management of violators in the community	51	48	3
8	R 2	Training on CBT skills	20	12	8
9	R 2	Training on tour guide at the on-site	20	11	9
10	F 3	Training on capacity building for local communities to adapt to climate change and social impacts	98	50	48



Photo 6 Workshop on biodiversity conservation for DONRE, DARD, DOST staff



Photo 7 Training course for biodiversity of forest ecosystem



Photo 8 Training course for district/commune level officials on climate change and social impacts



Photo 9 Training course for local people to adapt to climate change and social impacts



Photo 10 Participants in Community Tourism Skill Training



Photo 11 Training for local people on planting techniques, maintenance, sustainable and clean agricultural production

4.2.3 Efficiency

4.2.3.1 Analysis of budget release status

Efficiency is a fundamental aspect of project management that measures the relationship between inputs and outputs. In spite of the sound physical progress reaching the turning point of achievement, however, the financial progress did not follow a similar pattern with it. The targeted amount of budget execution to IA was USD 816,239. However, so far, only USD 466,536 has been transferred from the Secretariat to the IA (Figure 4).

It was notable that only half of the targeted amount was utilized for achieving good physical performance. This financial disjunction suggests that the project's budget planning may have been based on unrealistic cost estimates that do not align with market prices. Upon analyzing expenditure patterns and identifying savings from certain activities, the evaluation team concludes that resource allocation was not optimized. Some activities were allocated insufficient funds, hindering their ability to reach their targets, while others retained significant budget surpluses.

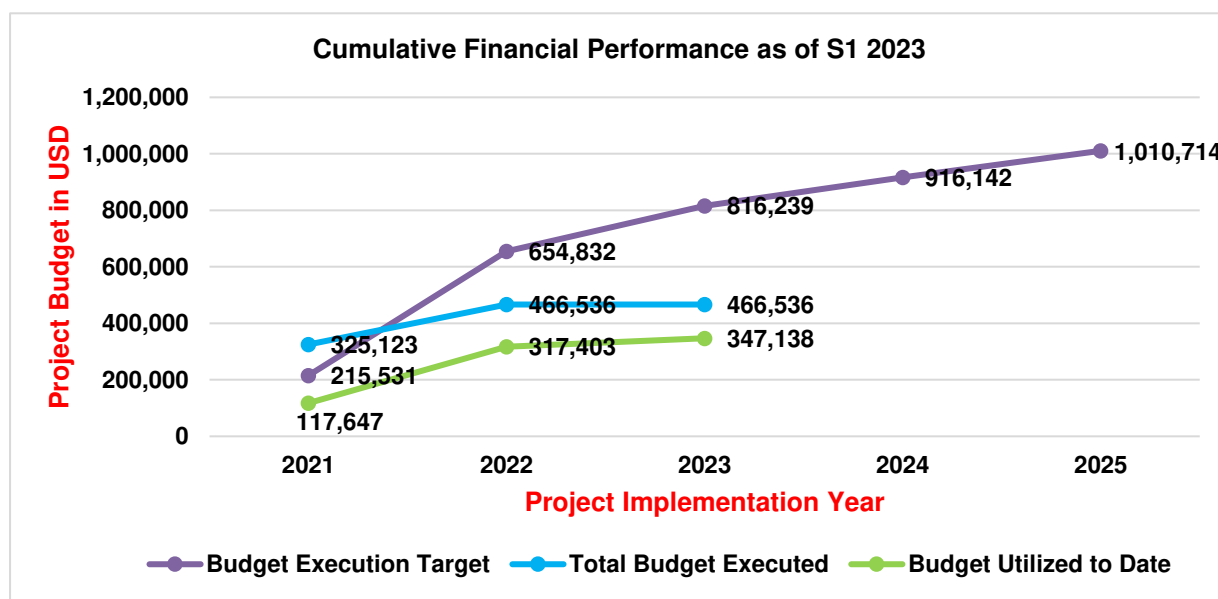


Figure 4 Cumulative Financial Performance as of S1-2023

4.2.3.2 Budget utilization and financial management

While recognizing the efficient utilization of resources in completing over 41 out of 67 project activities, there is room for improvement in resource allocation and process optimization. Discussions with the project team and CTNP management revealed that a comprehensive feasibility study was lacking during the project's initial development, leading to unrealistic budgeting and targets. Additionally, certain activity unit costs were not reflective of on-the-ground conditions. Notably, cost estimates for activities related to controlling *M. pigra* at the bird lake and managing the crocodile lake habitat were unrealistically low given their set objectives.

The PMU also consistently expressed a strong intention to acquire a crawler machine using the funds originally designated for the procurement of a motorboat and water bikes ever since the submission of the initial annual progress report in March 2022. The management believes that water motorbikes are unsuitable for use in the CTNP. Regarding the procurement of a motorboat, they feel that they have a reasonable number of boats and do not require additional boats. Consequently, in close consultation with the PMU, the CTNP management has proposed reallocating the budget initially allocated for the two procurements and supplementing it with project savings to acquire a crawler.

Despite the IA proposing the changes in activities and the OVIs, right after the completion of year 1

activities, they had to wait until the mid-term evaluation was over to get the changes approved. Following the field validation visit and consequent discussions with the management of CTNP, the evaluation team has asked CTNP to provide a quotation for a crawler machine within the available savings from Indirect Cost (USD 71,000) to enable the team to seek approval from the Secretariat subsequently and further discuss during the upcoming PSC meeting. Consequently, the evaluation team viewed that there is a need to explore opportunities for further optimizing resource allocation and streamlining processes during the upcoming PSC meeting of the project.

This raises questions about AFoCO's management approach and whether the Secretariat should rigidly adhere to the original project plan outlined in the Project Document. While the extent of flexibility that the Secretariat can exercise may be challenging to quantify, there is room for improvement in adopting a more adaptive management approach. This approach would involve fostering mutual understanding and maintaining open communication between the Implementing Agency (IA) and the Secretariat to promptly address issues that can be rectified during the project's duration.

4.2.4 Impact

4.2.4.1 Observations from the on-site verification

Some of the remarkable accomplishment from the project so far includes the habitat management efforts undertaken at the Crocodile Lake and Nui Tuong grassland (Photo 12, 13, 14, and 15).

Livelihood improvement interventions including the supply of valuable fruit trees and the development of grazing pastureland appear promising. The beneficiaries from the three villages are already content with the project interventions and look forward to improving their livelihoods (Photo 16). Besides improving the coordination with the park management, such interventions in the three buffer villages have also been instrumental in increasing conservation awareness among the communities, which has been quite influential in garnering support and participation of the communities in forest patrolling efforts.

Further, with the development of the grazing pasture in Village 7, the local communities have stopped sending their livestock for grazing into the park area, thereby preventing any conflict with wildlife and the park staff (Photo 17).

4.2.4.2 Way forward for long-term impact

While it is premature to conduct a comprehensive evaluation of the project's long-term impact, initial outcomes and various indicators suggest a positive trajectory. Preliminary data, as well as insights gathered from a focus group interview with stakeholders, point to a promising impact. Notably, beneficiaries from the three villages involved in the project have expressed their desire for additional interventions, such as support for fertilizers, capacity-building programs, and irrigation facilities, to further enhance productivity. They remain optimistic about achieving the long-term impacts envisioned during the project's inception phase. The project is found to be positively influencing the livelihoods of beneficiaries in the three villages and contributing to conservation efforts in Cat Tien National Park.

Project interventions mainly target the conservation of biodiversity, improving capacities of park staff and livelihood improvement of local people, and engagement in forest protection. Villagers responded to open-ended questions on benefits obtained from the project were increased jobs and income for households, an opportunity to sell traditional handicrafts, improved barren land, support of plant varieties (e.g., grasses and valuable trees) and joining the forest protection agreement with the CTNP. Villagers responded that they get a monthly income of about VND 1 million for 5-time patrolling per month by joining the forest protection while they expect income from high-value trees soon within 5 years. The tangible impacts of high-value trees on the livelihood improvement of local people could better be assessed once the villagers start making income from the valuable fruit trees.

According to responses from villagers, park staff, and project staff, the introduction of grazing pasture establishment and management has brought strong cooperation between the park staff and villagers. Conflicts due to illegal grazing in the park have been almost negligible. During the focus group interviews, park staff consistently responded just like in the questionnaire survey that the capacities building programs through the project have brought positive impacts in performing their duties and suggested more programs related to biodiversity, wildlife surveys, GPS, and drone utilization, developing plans for patrolling, and study visits for knowledge sharing and more livelihood improvement activities for local people for greater impacts.

4.2.4.3 Publication of the project stories (a suggestion to the Secretariat)

To enhance AFoCO's visibility and underscore its role in working towards a Greener Asia with resilient forests, landscapes, and communities, it is strongly recommended to publish effective and genuine project impact narratives for all its projects encompassing various beneficiaries, regions, and project types, illustrating AFoCO's extensive reach and unwavering commitment to a wide range of worthy causes.



Photo 12 Artificial water hole created for animals at the Nui Tuong grassland



Photo 13 Evaluation team visited Nui Tuong grassland



Photo 14 Crocodile Lake before habitat improvement



Photo 15 Crocodile Lake after removing floating vegetation



Photo 16 Local people planted high-value trees provided by the project



Photo 17 Villagers harvesting the grass from their grazing pastureland

4.2.5 Sustainability

The project seems to have adopted proactive measures to secure its sustainability post-completion. The engagement of stakeholders and the investment in capacity-building have yielded promising outcomes, which are anticipated to increase the probability of a lasting project impact. Furthermore, it remains crucial to persist in fortifying partnerships and monitoring mechanisms to guarantee the endurance of project achievements.

4.2.5.1 Mechanisms for continued support beyond project duration

While it might be early to assess the sustainability of the project midway through implementation, the evaluation team explored potential factors that could support financial sustainability and reviewed relevant regulations and policies that might come into play after the project's completion.

In Viet Nam, there are laws and policies that support enhancing biodiversity conservation capacity, adaption to climate change, poverty reduction and local livelihood improvement, and sustainable management of forest resources. The existence of such policies and laws could be supportive of the sustainability of the project.

As part of its practical initiative, it is also notable of the CTNP's initiative to establish a village livelihood fund for ethnic minorities associated with Payment for Forest Ecosystem Services and forest protection. It is viewed as a supportive tool for the sustainability of the project in the long run with lasting impacts and benefits for the beneficiaries.

During the interview, villagers shared ideas for enhancing the project sustainability, such as getting further support in terms of training, and supply of fertilizers to enhance their capacity and productivity to improve their income level. The park staff revealed that consensus, commitment, and close coordination among relevant stakeholders at all levels are essential to ensure sustainability.

Data from the Centre for Environmental Education and Service at CTNP indicates a significant increase in the number of visitors to wildlife sightseeing sites over the past three years (Figure 5). Even accounting for the post-coronavirus impact, the number of visitors in the first six months of 2023 has already surpassed the total for the entire year of 2022. This trend suggests a positive sign for the park's financial sustainability, particularly through the revenue generated from entrance fees for wildlife sightseeing.

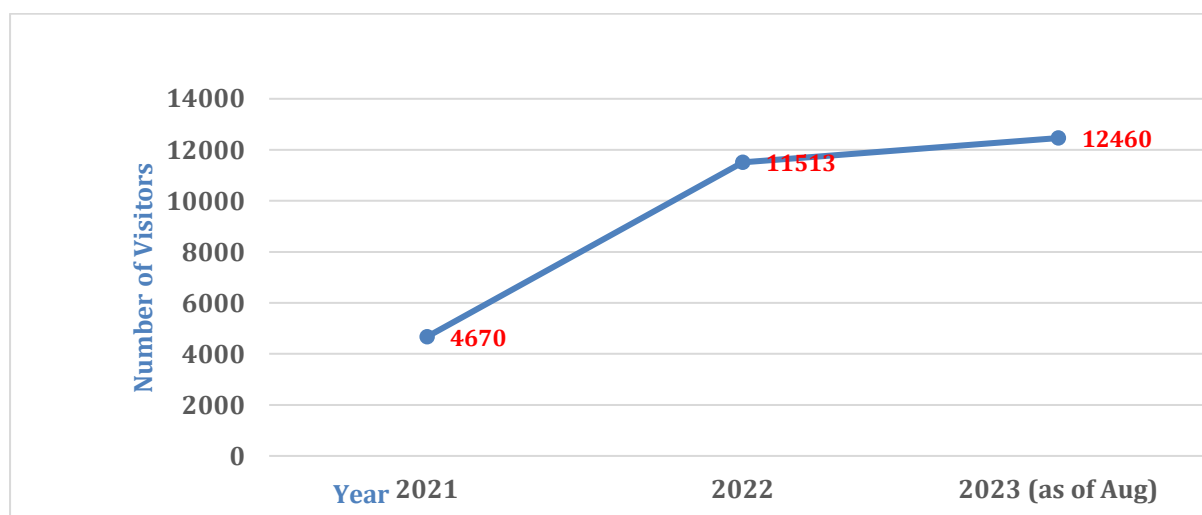


Figure 5 Total number of visitors at the Nui Tuong grassland and Crocodile Lake

4.2.5.2 Long-term plan for human resource development

Cat Tien National Park (CTNP) was established in 1992, encompassing the areas of Nam Cat Tien Nature Reserve in Dong Nai province (protected since 1978), Cat Loc Nature Reserve in Lam Dong province (protected since 1986), and Tay Cat Tien Nature Reserve in Binh Phuoc province (protected since 1996). As of April 2023, CTNP falls under the jurisdiction of the Forest Protection Department (FPD) within the Ministry of Agriculture and Rural Development (MARD).

Cat Tien National Park (CTNP) currently employs a workforce of approximately 214 individuals, consisting of 151 permanent staff members and 63 contract staff (Table 13). The educational background of the majority of these employees ranges from university and college graduates to vocational high school graduates, with many of them working within the park's protection department. CTNP offers a diverse array of activities to cater to visitors, including trekking trails and a primate rescue and rehabilitation center.

While the current staffing pattern adequately serves CTNP's primary focus on biodiversity conservation, there may be a need to consider a long-term human resources development plan. Such a plan could prioritize the recruitment and training of researchers with postgraduate degrees, especially for departments like the Department of Science and International Cooperation and the Center for Conservation and Development of Species. This strategic shift could enhance CTNP's role in contributing to scientific endeavors and furthering its impact.

Table 10 Staffing pattern of CTNP

No	Departments	Staffing			Qualification			
		Total	Payroll staff	Contracted employees	Postgraduate degrees	University degrees	Colleges / Vocational high school	Others
1	Directorate	3	3	n/a	3	n/a	n/a	n/a
2	Administration and Personnel Department	14	8	6	n/a	7	n/a	7
3	Planning and Finance Department	6	4	2	2	4	n/a	n/a
4	Science and International Cooperation Department	6	6	n/a	2	4	n/a	n/a
5	Center for Ecotourism and Education	28	7	21	2	7	4	15
6	Center for Conservation and Development of Species	14	10	4	n/a	8	4	2
7	Forest Protection Department	143	113	30	n/a	59	52	32
	Total	214	151	63	9	89	60	56

4.2.5.3 Gender

The project needs to integrate gender mainstreaming into the project management cycle. Recognizing gender-related factors is essential for achieving sustainable development goals, the IA should actively embed the development of gender-related skills and competencies among the project activities. The first step will be to make balance in the participation ratio between men and women for capacity building activities, such as workshops and training.

Adhering to AFoCO's commitment to promoting equality and inclusivity, as outlined in AFoCO's Gender Policy, the Secretariat also needs to enhance incorporating analytical tools to identify the distinct needs and priorities of women, men, boys, and girls in its projects. By incorporating gender mainstreaming into project activities, AFoCO can ensure the creation of a more inclusive, equitable, and impactful project that genuinely reflects AFoCO's values and objectives.

4.2.5.4 Environmental and social safeguards

This project is not currently obligated to assess its environmental and social safeguard management because it was approved before the endorsement of the AFoCO policy on Environmental and Social Safeguards (ESS). Despite the absence of a certified ESS tool by AFoCO, the evaluation team recognizes that the project has managed its operations in a way that harmonizes with local communities and considers various environmental factors.

In the long-term perspective, it is essential for the Secretariat to ensure the integration of ESS management into project activities as a foundational aspect of responsible and sustainable project management. This integration will play a crucial role in risk mitigation, protecting human rights, and promoting sustainable development. It ensures compliance with the legal requirements and fundamental principles of responsible and sustainable project management. Moreover, it serves to safeguard the interests of people, the environment, and project stakeholders while enhancing the prospects of project success and long-term positive outcomes.

4.2.6 Coherence

4.2.6.1 Internal coherence

From the government's standpoint, the evaluation team observed that the project exhibits strong internal coherence. Its various components, including biodiversity conservation measures and livelihood improvement interventions, are logically connected and mutually reinforcing. For instance, the current livelihood activities in the three villages complement prior initiatives implemented by the local government a few years ago. There are no apparent contradictions or conflicts within the project's design or implementation, underscoring a well-integrated approach.

However, from AFoCO's perspective, the evaluation team could not find the same level of internal coherence among its past and current projects. For instance, in the realm of biodiversity conservation, there is a regional project titled "Domestication of Endangered, Endemic, and Threatened Plant Species in Disturbed Terrestrial Ecosystems in Malaysia and Thailand (AFoCO/010/2016)⁴." This project primarily focused on research and had limited social inclusion and community engagement.

Considering that this project represents AFoCO's first foray into national park matters, the Secretariat should assess its alignment with the organization's strategic priorities and identify relevant factors for consideration when developing future projects. This evaluation suggests the importance of aligning project objectives and activities with AFoCO's broader mission and goals for increased effectiveness and impact.

4.2.6.2 External coherence

Considering that the project primarily focuses on capacity building, research activities, and conflict management with local communities, the evaluation team conducted an assessment of the project's external coherence based on the research topics conducted in CTNP.

The research trends highlighted in Table 14 provide insights into the project's alignment with the complex issues faced by CTNP over the past two decades. In the early 2010s, research primarily centered around conflict management between park management and ethnic minorities. This research focus later shifted towards value-added analyses related to forest and biodiversity, encompassing topics like ecotourism and REDD+ initiatives. Subsequently, studies delved into the broader perceptions of natural resources, with topics such as visitor satisfaction, culminating in assessments of the Payment

⁴ The project overview is here: <https://afocosec.org/project/010/>

for Ecosystem Services application. In more recent years, research topics have diversified, concentrating on methodologies for improving the livelihoods of local communities. This diversification includes research on participatory forest protection by ethnic minorities and studies on non-timber forest products (NTFPs). This evolving trend demonstrates CTNP's dual commitment to traditional conservation and the creation of diversified income opportunities for residents in the buffer zones.

Considering that the largest investment of the project is directed towards climate change and social inclusion, it aligns well with the current challenges faced by CTNP. The project's various livelihood improvement activities are instrumental in enhancing climate change adaptation within the local communities. It also appears that the conflicts between CTNP and the ethnic communities residing in the buffer zones have diminished. The low education level of these communities, which was identified as a key contributor to conflicts, is gradually being overcome. During focus group interviews with three village groups, it became evident that community members are increasingly motivated to provide their children with higher education opportunities.

Table 11 List of research in the CTNP from 2010 to 2023

N	Title	Year	Authors
1	Outcomes of Local Ethnic Minority Participation in Forest Protection of Cat Tien National Park	2023	Duong T. M. P., et al.
2	Non-Timber Forest Products in Cat Tien: Local Use and Sustainable Management	2023	Thanh Sang Dinh and Thi Van Pham
3	The Role of Livelihood Initiatives in Reducing Non-Wood Forest Product Reliance in Protected Areas of Southern Vietnam: Opportunities and Challenges	2022	Bruyn L. D., et al.
4	Nature and Level of NTFP Reliance: A Case Study in the Buffer Zone of Cat Tien National Park, Vietnam	2021	Duong T. M. P., et al.
5	Impacts of Payment for Forest Environmental Services in Cat Tien National Park	2021	Pham, T.T., et al.
6	Participation of Ethnic Minorities in Natural Forest Management: Cat Tien National Park, Vietnam Case Study	2021	Dinh Thanh Sang
7	Attitudes of Ethnic Minorities Towards Biodiversity Conservation in Cat Tien National Park, Vietnam	2020	Dinh Thanh Sang
8	Monitoring of Forest Land Use/Cover Change in Cat Tien National Park, Dong Nai Province, Vietnam Using Remote Sensing and GIS Techniques	2019	Kovyazin V. F., et al.
9	Perception Towards Biodiversity of Different Visitor Segments in Cat Tien National Park, Vietnam	2019	Minh-Hoang Nguyen
10	Ethnic Minorities and Forest Land Use: A Case in Can Tien National Park	2019	Dinh Thanh Sang
11	Visitor Satisfaction with Services for Environmental Interpretation in Cat Tien National Park, Vietnam	2017	Thi Thuy Linh Phan
12	Stakeholder Model Application in Tourism Development in Cat Tien, Lam Dong	2016	Sinh B. D., et al.
13	Factors Affecting Tourists' Satisfaction Towards Nam Cat Tien National Park, Vietnam — A Mediation Analysis of Perceived Value	2015	Mai Ngoc Khuong and Pham Dac Luan
14	Barriers to Community Engagement in Community-Based Ecotourism Framework – A Case Study of Talai Commune, Nam Cat Tien National Park in Vietnam	2015	Duong Thi Minh Phuong
15	The Economic Value of Cat Tien National Park	2014	Emerton L., et al.
16	Cat Loc Landscape-Cat Tien National Park Pro-Poor REDD+ Project, Vietnam	2014	Thu Ba Huynh
17	Evidence of an Emerging Domestic Ecotourist Market from Cat Tien National Park, Vietnam	2014	Hue-Huong Do and David Weaver
18	Differences Between Vietnamese and Western Protected Area Visitors in Vietnam: Evidence from Cat Tien National Park	2013	Huong Hue Do and David Weaver
19	Cat Tien National Park	2013	Nguyen, H.T. and Yen, H.M.
20	An Analysis of Conservation and Development Trade-offs at the Cat Tien National Park, Vietnam	2012	Anderson Z. R., et al.
21	Role of Social Capital in Determining Conservation Attitude: A Case Study from Cat Tien National Park, Vietnam	2011	Nguyen N. T. et al.
22	The Blurred Boundaries of Voluntary Resettlement: A Case of Cat Tien National Park in Vietnam	2010	Jason Morris-Jung and Robin Roth
23	Contribution of Forest Resources to Local People's Income: A Case Study in Cat Tien Biosphere Reserve, Vietnam	2010	Sang D. T., et al.
24	Participation of Ethnic Minorities in Ecotourism: Case Study of Cat Tien Biosphere Reserve, Vietnam	2010	Dinh Thanh Sang
25	Conflicts in Conservation: Territorial and Value-Based Implications for Biodiversity in Cat Tien National Park, Vietnam	2010	Victoria Bateman

4.3. Best practices and lessons learned

The mid-term evaluation team identified three best practices among the project activities that highlight the successful approaches and interventions from the Project.

4.3.1 Valuable Discoveries Resulting from Intensive Species Monitoring and Research Efforts

CTNP's successful implementation of annual monitoring for seven key wildlife species underscores the importance of robust habitat management interventions facilitated by the project. This intervention has yielded a noticeable surge in wildlife sightings within the park, consequently attracting a higher volume of visitors who are primarily drawn to observe wildlife at the Nui Tuong grassland and the crocodile lake.

Further, CTNP has pioneered a model for cultivating Golden Camellia as part of genetic material preservation efforts. During research on the Camellia species within the park, CTNP made a significant discovery: one previously undocumented Camellia species, *Camellia capitata* was identified, expanding the species roster for CTNP.



Photo 18 Orchids collected from the wild and planted at CTNP Headquarters for gene conservation



Photo 19 Evaluation team visited the orchid house



Photo 20 Flowers of Camellia capitata in the wild of Cat Tien National Park

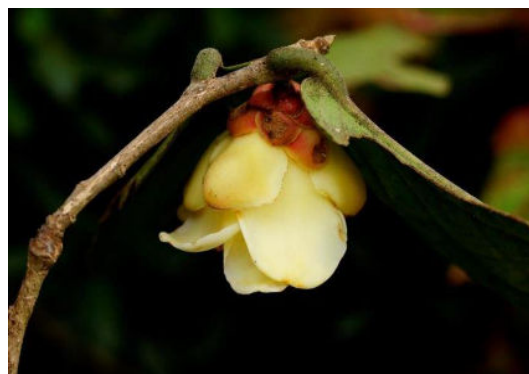


Photo 21 Flower of Camellia capitata in the wild of Cat Tien National Park

CTNP is also renowned for its rich biodiversity, including a dazzling array of orchid species. However, the park has not been able to conduct an intensive survey to study or document the orchid species in the park. To enhance orchid conservation efforts in CTNP, the project supported the survey to study orchid diversity and the establishment of an Orchid greenhouse.

The CTNP listed down about 100 species of orchids, wherein the survey supported by the project has recorded and photographed 80 species. Specimens of all these 80 species were carefully transplanted into a dedicated ex-situ orchid garden established within the park headquarters. To provide specialized care to these transplanted orchids, the project also supported the construction of a greenhouse currently

undergoing.

Out of the eighty species mentioned above, 10 species are yet to be taxonomically identified, and the management will continue the drive to have these species identified in the future. Of the seventy identified species, seven (7) species are new records for CTNP, adding to the plant list of the park. The names of the new species of orchids are: 1) *Aerides falcatum* Lind; 2) *Bulbophyllum andersonii* (JD. Hooker) JJ Smith; 3) *Eria lasiopetala*; 4) *Gastrochilus somai*; 5) *Liparis curtisii* Seident; 6) *Liparis renieru* Finet; and 7) *Pholidota articulate* Lindley.

In the face of habitat loss, climate change, illegal trade, and unsustainable harvesting, ex-situ conservation provides a safety net for orchid species facing extinction. Orchid conservation serves as a testament to the importance of preserving Earth's biodiversity and the beauty and wonder it brings to our world. This ex-situ orchid conservation program at CTNP may become a symbol of hope for the future, ensuring that these exquisite flowers continue to bloom in their natural habitat.



Aerides falcatum Lind.



Bulbophyllum andersonii (Hook.f.)
J.J. Sm.



Eria lasiopetala (Wild.) Ormerod



Gastrochilus somai (Hayata) Hayata



Liparis curtisii Seident.



Liparis renieru Finet.



Pholidota articulate Lindley.

Photo 22 Seven New Orchid Species Discovered in CTNP

4.3.2 Customized Capacity-Building Initiatives Strengthens Conservation Endeavors

Bolstering the competencies and expertise of project team members, stakeholders, and project beneficiaries can significantly elevate the execution of the project. Diverse, individualized capacity-building initiatives were undertaken as part of the project, effectively addressing the specific requirements of each stakeholder. The project team and CTNP staff underwent training encompassing biodiversity conservation, forest patrolling, and species monitoring, accompanied by immersive experiences and educational visits to other national parks and protected areas within and outside Viet Nam. The outcomes of these training translated into heightened conservation endeavors within the CTNP.

Similarly, the training on plantation techniques for valuable fruit trees and grazing pasture development, conservation awareness programs and local tour guide training organized for local communities living in the buffer areas of the CTNP played a pivotal role in not only ensuring the success of livelihood improvement interventions across the three villages but also in garnering their support for CTNP's conservation endeavors.



Photo 24 Training for local tour guides



Photo 25 Training for local tour guides



Photo 26 Wildlife species monitoring training



Photo 27 Training for homestay management

4.3.3 Building Conservation Partnerships through Livelihood Support

Village 7 in Dac Lua commune is one of the 11 communes under the Cat Tien National Park and is the farthest commune in the Tan Phu district under the Dong Nai province. Based on the statistics available with the CTNP, there are 203 households, and this village has the highest number of cattle (approximately 242 buffalos and 471 cows (Da Bong Cua Ranger Station, August 2019). The main income for the ethnic minority living in Village 7 is from rice cultivation and animal husbandry, and this village is quite popular for cattle breeding programs. However, the land has lost its productivity due to outdated farming practices. Fodder for the cattle had become scarce, and there was no grazing land for cattle. As a result, the villagers often sent their cattle to graze inside the national park. These

practices have often resulted in conflict between the park rangers and the cattle owners since the free-grazing cattle often destroyed the plantation. Further, there was always a high risk of forest fire and the spread of zoonotic diseases between the cattle and the wildlife.

To address this issue, the project with CTNP supported the establishment of intensive grazing pasture management for the ethnic minority in Village 7. This activity was developed to reduce the grazing pressure on the CTNP and enhance the livelihood of the communities through the support of pasture development. Accordingly, the project supported the development of grazing pasture on 20 hectares of land belonging to 23 households.



Photo 28 Focus group interview with the communities of Village 7

The management of CTNP selected the beneficiaries based on some criteria like being an ethnic minority with a household registration number in the village, low-income level, having a minimum land holding of 0.1 ha, household members committed to participating and supporting the CTNP in the implementation of the project activity and other forest protection works; also committed to contributing to the Payment for Forest Ecosystem Services to the Village Livelihood Fund. After selecting households, the CTNP provided training for planning and establishing the pasture with support from the Department of Agriculture and Rural Development and the Agriculture Center of Tan Phu District.

Effective conservation efforts can be enhanced by integrating them with community livelihood enhancement initiatives. When local communities can derive benefits from the conservation projects, they become more engaged and supportive. The management of CTNP has also observed strong support and involvement of the communities from the three buffer villages. These three villages have benefited from the AFoCO project mainly in terms of capacity-building programs and support for livelihood enhancement (e.g., valuable fruit trees and development of grazing pasture). The communities of these villages were consulted during the project development phase, and accordingly, the CTNP developed livelihood enhancement activities and capacity-building programs based on the needs of the communities. With the implementation of these activities, CTNP has observed strong support and collaboration, mainly in forest protection and monitoring efforts from the communities of these three buffer villages.

Additionally, the CTNP has finalized and signed Coordination Regulations with the police and military units to collaborate in forest protection and forest fire prevention. Similarly, the commitment was also signed by the households living adjacent to the park to strictly comply with the provisions of the forestry law and participate in forest protection and forest fire prevention efforts. Further, with the support for developing a five-hectare grazing pasture in Village 7, which has the highest number of cattle among the villages, the CTNP noted that grazing pressure in the nearby forest area has almost stopped and thus resulted in almost no conflict between the forest rangers and the communities from the village. Further, community engagement in the project intervention has also created a sense of stewardship and responsibility, which has led to the reduction of illegal activities and the promotion of sustainable practices.

5. Conclusion

The mid-term evaluation of the project "Conservation and development of forest ecosystems biodiversity resources at Cat Tien National Park, Viet Nam (AFoCO/024//2021)" aims to provide a comprehensive assessment of the project's progress and to identify areas for improvement. The following are the key points that have emerged from the evaluation:

Relevance: The project demonstrates **strong relevance followed by very good performance** to its objectives and goals, aligning well with the needs of stakeholders and the broader policy context of Viet Nam Forest. While minor adjustments have been made to accommodate evolving circumstances, the project's relevance remains very high, as indicated by an average perceived score of 4.0 out of 5.0 from three stakeholder groups - the project team, park staff, and villagers.

Effectiveness: The project has shown **good performance** in achieving its intended outcomes and objectives, with a physical performance rate of 68.3%. Out of 67 planned activities, 41 have been completed, and 8 out of 18 outputs achieved. The project management team has shown adaptability in responding to challenges and opportunities even though there are some OVs of the activities need to be adjusted based on the mid-term evaluation. Stakeholders view the project's effectiveness favorably and very high, with an average perceived score of 4.2 out of 5.0.

Efficiency: The project in resource allocation and utilization shows **a low satisfactory level of efficiency**, even though the stakeholder group viewed the project has high performance on efficiency average score of 4.0 out of 5.0. The low financial performance at **41.8%** may have been achieved due to insufficient cost planning during the project's development phase despite being able to maximize the completion of the most of the activities. Opportunities to enhance resource allocation and streamline processes are available, as suggested in recommendations and budget utilization plans.

Sustainability: The project has taken **positive steps with good performance** toward ensuring sustainability beyond completion. Stakeholder engagement and capacity-building efforts have yielded favorable results. Continued efforts to strengthen partnerships and monitoring mechanisms are crucial for sustaining project outcomes, incorporating gender and ESS. Stakeholders perceive the project's sustainability favorably and very high, with an average score of 4.1 out of 5.0.

Impact: While it is premature to fully assess long-term impact, preliminary data and stakeholder feedback suggest **a positive trajectory with good performance**. Beneficiaries from the three villages have expressed a desire for additional interventions, indicating their hope for lasting impacts. The project has made a significant contribution to staff capacity, conservation efforts, and research work in CTNP. The average perceived impact score from all stakeholder groups is high as 4.0 out of 5.0.

Coherence: The project exhibits **a decent level of coherence with good performance** along with the stakeholder groups' interests, without significant internal contradictions or conflicts within the project's design or implementation. The perceived average score for two stakeholder groups – project team and park staff - is 4.3 out of 5.0, the coherence of the project is indicated as very high from the perspectives of stakeholders.

In conclusion, the project has demonstrated significant promise and the potential to make a substantial impact on the conservation efforts of Cat Tien National Park and the enhancement of the livelihood opportunities of the communities living in the three buffer zones of the park. Three (3) best practices from the project interventions have been identified viz. the park's conservation efforts and scientific record-keeping, customized training programs, and effective conflict management in buffer zone areas.

Yet, the management of the project showed that it may be a potential factor blocking the success of the

project, for which the mid-term evaluation outlined recommendations to be geared towards enhancing project efficiency, financial management, and the continued realization of project objectives. Adjustments of some activities have been proposed by the IAs and have been recommended by the evaluation team and accordingly, revision of the project log frame is recommended based on the decision of the upcoming PSC meeting. By implementing these recommendations and maintaining a proactive and adaptable approach, it is believed that the project will be well-positioned to navigate challenges, seize opportunities, and ultimately fulfill its mission.

6. Recommendations

A. Recommendation for Implementing Agency: Cat Tien National Park

1. Regular Reporting and Communication (*Due date: constantly until the completion of the project*)

Overall, this project does not have efficient communication with the Project team at the secretariat compared to other projects, which may affect project effectiveness and efficiency. Therefore, the IA should uphold regular and open communication with the Secretariat concerning project-related matters. In cases where unforeseen circumstances necessitate revisions or alterations in the project timeline, scope, approved activities, or external factors that may impact finances, the IA is required to promptly notify the Secretariat and engage in collaborative discussions rather than making unilateral decisions or waiting until the next Project Steering Committee (PSC) meeting. This approach ensures transparent and consistent communication with project stakeholders regarding financial updates and potential resource reallocation needs. Furthermore, it facilitates timely decision-making to prevent further delays in project activity implementation.

2. Financial Review to Increase Cost Efficiency (*Due date: by the upcoming PSC meeting*)

As of August 2023, the project's financial disbursement performance falls short, reaching only 41.8% of the total project budget, while it showed 68.3% of physical performance by executing 41 out of 67 planned activities. It indirectly implies that the budget was not feasibly planned, reflecting the correct market price. Hence, the IA should analyze the project's budget allocation and expected expenditure patterns for the remaining period and report its analysis results at the upcoming PSC meeting. If the PSC resolves to revise the work plan for the remaining project period, subsequent adjustments should be made immediately so that the project would be able to enhance its overall cost-effectiveness.

3. Adjustment of the Objectively Verifiable Indicators in the Logical Framework (*Due date: by the 4th upcoming PSC meeting*) (Refer to Table 11 & Table 12)

Upon detailed review of the proposal submitted by IA, the recommendations of the evaluation team are indicated in two categories based on the level of adjustments. Eight (8) activities that the IA proposes either to retain or to modify in terms of quantitative output adjustments (*minor adjustments*). Out of the seven activities, five (5) were verified that such adjustments still remain congruent with the project's objectives. Pertaining to activities E.3 and J.4, the IA was advised for the retention of the initially planned targets. However, with respect to the proposed reduction in target areas for annual habitat management from 5 ha to 2.5 ha, maintaining the original target was recommended since the procurement of a crawler was expected to tackle the prevailing issue of floating plants in a speedy manner (refer **Table 11**).

Three (3) activities where the IA proposed excisions based on real-world constraints hindering target achievement (*major adjustments*). In this regard, it is recommended to formulate alternative targets for each activity with a strategy to encapsulate the original intent within the project framework. For instance, the IA noted that effective Mimosa control mandates entire area regulation, and the project's purview extends only to 10 ha annually. As a remedy, the evaluation team proposed orchestrating a workshop or symposium centering on Mimosa control methodologies, especially since this issue pervades Vietnamese wetlands. This alternative endeavor seeks to rejuvenate national research priorities surrounding Mimosa control. Another illustration pertains to the commercialization of the Camelia species. Given the potential for over-exploitation by local people upon recognizing its utility, coupled with its conservation needs, the IA suggested not implementing this initiative. As its alternative activity, instead of elimination, it is recommended to conduct a scientific survey to explore the feasibility of its prolonged commercialization (refer to **Table 12**).

4. Reinvest Project Savings and Carryover for Scaling and Replication of Impactful Activities (Due date: by the 4th upcoming PSC meeting) (Refer to Table 13)

Upon assessment, the amount of project savings was identified after achieving activity targets. In alignment with the stipulations set forth in the preliminary agreement, as well as the consensus reached during prior deliberations, it is advised that IA furnishes a budget utilization strategy for the savings and any carry-over amount as of S1 of 2023, as referenced in **Table 13**. **This proposal is subjected to scrutiny during the upcoming 4th PSC meeting, where the IA is required to prepare for budget breakdown with the timelines for each proposed activity to seek approval from the PSC.**

B. Recommendation for AFoCO Secretariat

1. Sustainable Project Management

The analysis of project efficiency metrics within the Secretariat of AFoCO indicates potential areas for enhancement in project management protocols. The current Project Manual mandates substantial revisions to the project work plan and budget after mid-term evaluation while allowing minor modifications through the Project Steering Committee (PSC) decisions.

However, narrowing down to this project's finding on the low efficiency due to initial planning inaccuracies, this observation gives us a fundamental question of how the successful management of the project can be marked when significant issues are found out in the early stage of project implementation.

Presently, projects of AFoCO experience waiting for 30 months before proposing changes to project activities, despite early recognition of such necessities for modifications. This lag can negatively impact the project's tangible progress, and financial stability, and disrupt related activities awaiting the implementation of proposed changes.

To address these issues, the Secretariat may need to approach 'sustainable management' considering the final-end project impact. At the implementation level, for example, it can be considered when the PSC sees that the level of issues raised by IA is beyond the decision power of the committee, the PSC may decide to raise this issue promptly to the Assembly through the Secretariat following the existing guidance of the Project Manual. In the case of this project, there was not such a decision made by the PSC until the mid-term evaluation. Alternatively, an enhancement of the PSC's authoritative scope through amendments to the Project Manual can be also contemplated.

More than that, this analysis suggests a need for technical refinement in AFoCO's project development framework. The Project Manual currently lacks emphasis on 'ex-ante evaluation', including feasibility studies during project development phases. It is critical for the Secretariat to thoroughly evaluate methods to minimize negative influences on project development.

Additionally, it is recommended that the Project Manual mandates implementing agencies to submit reports, publications, or findings related to projects in English or provide English translations for reports written in local languages. This practice would enhance transparency and ensure that valuable information is readily accessible to the Secretariat for review and future reference.

Table 11 Proposals on minor adjustments of the activity targets (OVIs) and the recommendations of the evaluation team

Narrative		Original OVIs	Proposed OVIs	Remarks from Evaluation Team
Objective 1: To improve knowledge and information sharing on biodiversity of forest ecosystems of the Park for local managers and policy makers				
<i>Output 2: Study tour in national parks and protected areas inbound and outbound</i>				
B.1	Assess the needs and plan of study tour	At least 15 staff of the DONRE, DARD, DOST of Dong Nai, Lam Dong provinces and 80% of district and commune leaders in the buffer zone have been interviewed and an assessment report on the needs and plan of study tour has been produced by Quarter 1 of 2023	At least 15 key staff of the CTNPs	Recommends the changes proposed
B.3	Organize a study tour to NPS and NRs inbound	A 3-day study tour with participation of 15 people to NPs and NRs inbound has been organized by Quarter 2 of 2023	Combined with activity M2 organised 2 trips to NPs, NRs, 15 people per/ trip at Con Dao, 15 people per/ trip at Cuc Phuong and Phong Nha - Ke Bang NP.	Due to budget constrain, this activity has been combined with activity M2. Considering that the activity has already been implemented, the team recommends the changes proposed.
Objective 2: To assess the climate change and social impacts on CTNP biodiversity and integrated management measures, improve management and conservation capacities of project stakeholders, and to engage local communities for forest management and protection				
<i>Output 3: Assess the climate change and social impacts to the biodiversity of CTNP</i>				
C.3	Develop a database of climate change and social impacts to CTNP biodiversity	A database (format and content) of climate change and social impacts to CTNP biodiversity has been developed by Quarter 1 2022	Database for climate change and social impacts to the biodiversity of CTNP developed using free software QGIS	Recommends the changes proposed
<i>Output 5: Implement measures and solutions to minimize negative impacts of climate change and social impacts at Cat Tien National Park (i.e. improving the habitat of Ramsar-Crocodile Lake and neighboring wetland).</i>				
E.3	Improve habitat of Ramsar-Crocodile Lake	5ha of habitat of Ramsar-Crocodile Lake has been improved every year.	2.5 ha of habitat of Ramsar-Crocodile Lake has been improved every year.	Retain the existing indicator of 5ha/year and recommend considering the use of a crawler.
<i>Output 7: Develop a model of planting Golden Camellia (Camellia spp.)</i>				
G.3	Develop and maintain plantation a model for the first 5 years	A 5-ha model of planting Golden Camellia in Nui Tuong with plantation of 4000 trees per ha) has been developed in 2021 and maintained from 2022 to 2025.	A 5-ha model of planting Golden Camellia in Nui Tuong with a plantation of 1200 trees (240 trees/ ha) has been developed in 2021 and maintained from 2022 to	Recommends the changes proposed

			2025.	
<i>Output 10: Organize training on forest protection skills associated with biodiversity monitoring, focusing on waterbirds, Phasianidae, Hornbills, large mammals, and small carnivores. Monitor some rare species by remote sensing technology by consultants, and monitor key species by CTNP</i>				
J.4	Monitor key species	At least 5 key species, focusing on waterbirds, Phasianidae, Hornbills, large mammals, and small carnivores, have been monitored yearly using remote sensing technology and annual monitoring reports have been produced accordingly.	At least 7 key species, focusing on Phasianidae, crocodiles, and large mammals, , have been monitored yearly using technology like camera traps and automatic recording devices procured through the project and annual monitoring reports have been produced accordingly.	The existing indicator on number of species can be retained since this can be an over achievement of the target indicator, however, the list of the species is recommended to be changed.
<i>Output 12: Develop coordination regulations on forest protection with local authorities, sign commitments on forest protection with households (without community forest protection committee establishment)</i>				
L.2	Finalize coordination regulations on forest protection, contents of cooperation with local authorities and commitments of HH	By Quarter 4 of 2021, 100% of communes (32 communes) at the buffer zone have signed coordination regulations on forest protection with the park and at least 70% of households in communes have signed commitment on forest protection.	By quarter 4 of 2021, 22 communes with 2,000 HH living adjacent to the park boundary have signed coordination on forest protection with the park	Recommends the changes proposed
<i>Output 13: Study tours and workshop inbound and outbound to NPs, NRs Participants would be the Park's staff and Leaders of communes, districts</i>				
M3	Organize study tours to NPs, NRs outbound	Two trips to NPs, NRs outbound have been organized in 2022 and 2023 with the participation of 20 people per trip.	One trip to NPs, NRs outbound have been organized in 2022 with the participation of 15 key staff	Due to budget constrain, only 1 trip with 14 staff was possible. Considering that the activity has already been implemented, the team recommends the changes proposed.
<i>Output 16: Support the planting, maintenance and marketing of high-value tree crops (cashew-nut, durian, avocado) to help improve the livelihoods of ethnic minorities in Village 3 and Village 4 of Phuoc Cat 2 commune</i>				
P.1	Using PRA methodology for identification of locations and participants and profiling. Support high-value trees to help improve livelihoods of ethnic minorities Village 3 and Village 4, Phuoc Cat 2 Commune	By Quarter 1 of 2022, 20 ha of high-value trees (cashew-nut, durian, avocado) have been supported to help improve livelihoods of at least 50 households of ethnic minorities in Village 3 and Village 4 of Phuoc Cat 2 Commune.	By Quarter 1 of 2023, 28.4 ha of high-value trees (cashew-nut, durian, avocado) have been supported to help improve the livelihoods of at least 49 households of ethnic minorities in Village 3 and Village 4 of Phuoc Cat 2 Commune . Further support to 20 HH to change cultivation practices to adapt to adapt the change is provided	Recommends the changes proposed

	Support for 20 households to change cultivation practices to adapt to climate change	N/A <i>(It has been mentioned in the project document but not included in the PIP Matrix)</i>	The project will have a short research for 20 households to change cultivation practices to adapt to climate change	Recommends the changes proposed
	Set up the Villages Livelihood Development Fund	The VLF will be started at the same time of the Project in 2020. <i>(It has been mentioned in the project document but not included in the PIP Matrix)</i> The beneficiary HH will contribute a minimum rate of 200.000 VND/HH/year from the PFES (minimum for the first 5 years) and 10%/year for 2 years compared to the initial investment of project (20% in 2 years) <i>(It has been mentioned in the project document but not included in the PIP Matrix)</i>	The VLF will be started at the same time of the Project in 2024 Only mobilizing the minimum 200,000 VND/year from their PFES income. Do not recovery 20% in 2 years of the support capital for HH.	Recommends the changes proposed
	Selected the consultant (Institute, University) for implementing the Project	Assigning the agency	Selected the consultant under Vietnam's Bidding Law	Recommends the changes proposed

Table 12 Proposals on major adjustments of the activity targets (OVIs) and the recommendations of the evaluation team

Narrative		Objectively Verifiable Indicators	Reason for changing the activity	Remarks from Evaluation Team
<i>Overall objective: To improve the conservation and development of forest ecosystems biodiversity resources at CTNP engaged with sustainable livelihood improvement for communities in the buffer zone.</i>				
Objective 2: To assess the climate change and social impacts on CTNP biodiversity and integrated management measures, improve management and conservation capacities of project stakeholders, and to engage local communities for forest management and protection				
<i>Output 5: Implement measures and solutions to minimize negative impacts of climate change and social impacts at Cat Tien National Park (i.e. improving the habitat of Ramsar-Crocodile Lake and neighboring wetland).</i>				
E4	Control <i>Mimosa pigra</i> at Bird Lake	10ha of <i>Mimosa pigra</i> at Bird Lake has been controlled every year.	The CTNP proposed for adjustment of the remaining budget from this activity to the activity E3; Improve habitat of Ramsar-Crocodile Lake. So far only 3 ha of the <i>Mimosa</i> invaded areas in the Bird Lake has been removed. The management feels that removing the <i>Mimosa</i> is ineffective since a large area of the lake (200 ha) is infested with <i>Mimosa</i> . Moreover, removing the <i>Mimosa</i> is also quite expensive since it has to be done physically. So the available budget is not sufficient to clear 10 ha annually. Therefore, they would like to allot the remaining budget to E3 considering the budget allocated to E3 is insufficient to achieve the 5 ha annual target.	The team found that physically removing <i>Mimosa</i> in a small area during the dry season was ineffective. Following extensive discussions with the PMU, the Evaluation Team recommends the following: (1) CTNP primarily consider the budgets from this activity could also be used to top up on activity E3, so that the annual target for E3 can be achieved, or (2) CTNP additionally consider, subject to budget availability, arranging a technical expert group meeting. This would facilitate a comprehensive exploration of potential solutions and a way forward to address the issue at hand.
<i>Output 7: Develop a model of planting Golden Camellia (Camellia spp.)</i>				
G5	Developing of product branding	From 2023 to 2025, brand of Golden Camellia has been developed and labelled in accordance with domestic legal regulations (marketing research in 2023; Label register in 2024; advertising in 2025)	The current intention for the Camellia plantation model is for conservation purposes only and the CTNP does not have any intention to venture into Commercial branding of Camellia species.	Instead of changing the activity, the evaluation team suggested the following: (1) CTNP to undertake a detailed study for the new camellia species <i>Camellia capitata</i> reported from the park as a result of activity G1. The feasibility study is to decide whether developing a product branding for Camellia is feasible. (2) Additional activities can be proposed if there are further savings (e.g., training on fly camera, wildlife rescue operation, etc.)
<i>Project management</i>				
1	Motor boat	A set of a motor boat with engine will be purchased by Quarter 4 of 2021	The CTNP has enough boats to cater to the daily requirement and therefore proposed to use the budget for this activity to buy a Crawler Machine	The Evaluation Team suggested that the PMU submit a quotation for the crawler within the budget limit of USD 71,000 (refer to Table 13 for details). The evaluation team further advised a new procurement by utilizing the savings from Indirect Cost only.
2	Water motorbike	One (01) Water motorbike will be purchased in Quarter 2 and Q3 of 2022.	Water bike is not very suitable to be used and hence the CTNP would like to divert the budget to buy a Crawler Machine	

Table 13 Budget Utilization Plan for the Project Saving and Carryover as of S1-2023

		Total Budget	Savings [A]	Carry-over [B]	Remaining budget for 2024-2025 [C]	Total Available for Utilization [A]+[B]+[C]	Status of Implementation	Budget Utilization Plan, proposed by PMU in consultation with the evaluation team
Output 5.	Implement measures and solutions to minimize negative impacts of climate change and social impacts at Cat Tien National Park (i.e. improving the habitat of Ramsar-Crocodile Lake and neighboring wetland)							
E.4	Control <i>Mimosa pigra</i> at Bird Lake	15,000		4,724	6,000	10,276	PROPOSED TO CHANGE	Refer to description of E.4 in Table 12.
Output 7.	Develop a model of planting Golden Camellia (<i>Camellia</i> spp.)							
G.1	Survey the potential and situation to build a model of planting Golden Camellia;	5,000	25			25	COMPLETED	Detailed research on the new Camellia species recorded in the CTNP will be initiated, for which \$ 3,000 from G5 will be utilized for this additional research work.
G.5	Developing of product branding; research and survey about Golden Camellia	13,000		3,000	10,000	13,000	PROPOSED TO CHANGE	From the \$13,000, \$ 3,000 will fund the additional activity proposed under G1. A feasibility study will be undertaken to decide whether developing a product branding for Camellia is feasible. After completing these two activities, if there is still savings, additional activities may be further proposed and considered at the PSC meetings.
Output 8.	Collect orchids (<i>Orchidaceae</i>) and set up a greenhouse							
H.2	Conduct inventory and collection of local orchids species	5,000	1,948	0		1,948	COMPLETED	A saving amount of \$1,948 will be utilized to complement activity H4. After the completion of activity H4, if there are still savings, it is recommended to be utilized to supply fertilizer to the communities of the three villages to enhance the productivity of the valuable fruit trees and grazing pasture.
H.4	Purchase equipment and supplies for the greenhouse system	8,000		7,120		7,120	ON-GOING	Remain to support the H4.

Output 16.	Support the planting, maintenance and marketing of high-value tree crops (cashew-nut, durian, avocado) to help improve the livelihoods of ethnic minorities in Village 3 and Village 4 of Phuoc Cat 2 commune							
P.1	Use PRA methodology for identification of locations and participants and profiling. Support high value trees to help improve livelihoods of ethnic minorities Village 3 and Village 4, Phuoc Cat 2 Commune	70,000	2,000	25,977	0	27,977	COMPLETED	The amount of \$27,977 is proposed to be used for supporting P1's three sub-activities which are not included in PIP (refer to Table 11).
P.2	Organize training on skills and knowledge for HH on planting and maintaining techniques, sustainable production development, clean agricultural production of specific local products, associated with CBT	20,000		18,680		18,680	COMPLETED	During the post-on-site verification, the IA proposed to utilize the savings amount of \$18,680 for supporting the supply of fertilizers to the communities of the three villages to enhance the productivity of the valuable fruit trees and grazing pasture followed by some additional capacity-building programs for the households in the three villages. Regarding this, the evaluation team views that it needs to consider providing training programs on fruit tree management and bio-fertilizers rather than just providing chemical fertilizers which may impact the CTNP. The rest amount of the savings will support the feasibility study on the establishment of the Homestay model in line with the development of the Village Livelihood Fund, as discussed during the wrap-up meeting on 4 Aug. and the research for 20 households to change cultivation practices to adapt to climate change.
Output 17.	Plan and establish intensive grazing pastures management for ethnic minority in Village 7, Dac Lua commune, Tan Phu district, Dong Nai province							
Q.1	Identify the grazing pasture's location and community participant profiling	2,500	2,068			2,068	COMPLETED	The savings will be utilized for procurement of fertilizers and supplying to the 23 households who were supported with the grazing pasture development in Village 7.
Q.2	Choose to purchase the grasses varieties, set up and manage grazing pastures	10,500	8,293			8,293	COMPLETED	
Indirect Cost								
	Travel	18,000	11,135	0		11,135	COMPLETED	The IA Proposed to use the amount allocated for the procurement of Motorboats and Water motorbike along with the saving and carryover which sums up to USD 71,229 to procure a Crawler. The evaluation team advised a new procurement by utilizing the savings from Indirect Cost only.
	Office equipment procurement	20,000	521	4,000		4,521	COMPLETED	
	Motor Boat (with engine)	22,500		22,500		22,500	Pending	
	Water motorbike	20,000		20,000		20,000	Pending	
	Fly Camera	7,500	922			922	COMPLETED	
	Stationery	10,000	2,548	1,786		4,334	COMPLETED	
	Communication	20,000	7,817			7,817	COMPLETED	
	Total Saving under Indirect Cost					71,229		

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2. Presentation Slides for the Mid-term Evaluation Meeting by the PMU. (August 2023). Cat Tien National Park.
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4. Project Annual Report 2022.
5. Project Document “Conservation and Development of Forest Ecosystems Biodiversity Resources at Cat Tien National Park” 2021.
6. Project Manual of the Asian Forest Cooperation Organization. (November 2020). Asian Forest Cooperation Organization.
7. Project Mid-Year Report 2022.
8. Project Mid-Year Report 2023.
9. Project Monitoring and Evaluation Guidelines. (November 2020). Asian Forest Cooperation Organization.
10. Record of Discussion for 1st Project Steering Committee Meeting on 30 July 2021
11. Record of Discussion for 2nd Project Steering Committee Meeting on 17 December 2021
12. Record of Discussion for 3rd Project Steering Committee Meeting on 29 November 2022
13. Report on Assessing the Potential of Building a Model of Planting Yellow Flower Tea Collection in Cat Tien National Park. (2022). Cat Tien National Park
14. Report on Performance Results to Activities “Supporting specialty tree varieties to improve livelihoods for ethnic minorities in villages 3 and 4, Phuoc Cat 2 commune, Cat Tien district, Lam Dong province” (Operation Code P1). (2022). Cat Tien National Park.
15. Report on Performance Results to Evaluate the Potential for Building a Garden to Collect Orchids in Cat Tien National Park (Activity code H1). (2021). Cat Tien National Park.
16. Report on Results of Small biological Renovation at Cat Tien National Park ((Operation codes E3, E4, E5). (2022). Cat Tien National Park.

Annex I: Log Frame in Project Document

	Narrative	Objectively Verifiable Indicators (OVI)	Means of Verification	Assumptions
Overall objective	To improve the conservation and development of forest ecosystems biodiversity resources at CTNP engaged with sustainable livelihood improvement for communities in the buffer zone.	By 2025, Biodiversity resources have been well protected and developed. The habitat has been improved. Local authorities and local people have closely engaged with CTNP. Livelihoods of local people and communities in the buffer zone have been improved. All kinds of violations have been decreased by 5%. The income of households' beneficiary has been increased by about 10% until the project ends.	Mid-term, Project Completion Report	CTNP has been provided with financial, technical experts. Trained staff committed and had a willing to work at the CTNP for a long time. Beneficiaries had consensus and committed to involve the project. Covid 19 has not affected the project activities.
Objective 1	To improve knowledge and information sharing on biodiversity of forest ecosystems of the Park for local managers and policy makers	At least 80 provincial officers from the DONRE, DARD, DOST of Dong Nai, Lam Dong provinces and 80% of district and commune leaders in the buffer zone have improved knowledge and information on biodiversity of forest ecosystems of the park	Project Completion Report	Trainees would be selected appropriately, with a learning time and good materials, and teachers with a good approach.
Output 1	Training, sharing knowledge, experiences and skills on biodiversity conservation to the Province, District, Commune Officers	At least 80 provincial officers from the DONRE, DARD, DOST of Dong Nai, Lam Dong, Binh Phuoc provinces and 80% of district and commune leaders in the buffer zone have participated in the training courses on biodiversity conservation	Report. Evaluation paper	Trainees would be selected appropriately, with a learning time and good materials, and teachers with a good approach.
A.1	Assess the needs of biodiversity training for local policy makers and managers	At least 30 staff/agency from the DONRE, DARD, DOST of Dong Nai, Lam Dong provinces have been interviewed and an assessment report on the needs of biodiversity training for local policy makers and managers has been produced by Quarter 2 of 2022	Progress Report (Physical/Financial)	Timely submission and analysis/reporting
A.2	Develop training materials and invite experts based on results of needs assessment	A set of materials used in training with high qualified experts has been developed by Quarter 4 of 2021	Set	Materials to be approved
A.3	Organize training courses for staff of DONRE, DARD, DOST of 2 provinces of Dong Nai, Lam Dong, districts and communes in the buffer	Two training courses for staff of DONRE, DARD, DOST of Dong Nai, Lam Dong provinces, district and communes have been organized in Quarter 3 of 2022 and Quarter 2 of 2023, respectively, with 52 people per course.	Course	Trainees have been improved capacity
Output 2	Study tour in national parks and protected areas inbound and outbound	A study tour to NPs and NRs inbound has been organized with the participation of 15 people.	Report. Evaluation paper	Trainees have been improved capacity
B.1	Assess the needs and plan of study tour	At least 15 staff of the DONRE, DARD, DOST of Dong Nai, Lam Dong provinces and 80% of district and commune leaders in the buffer zone have been interviewed and an assessment report on the needs and plan of study tour has been produced by Quarter 1 of 2023	Report	Planning to be approved
B.2	Develop a study tour plan	A study tour plan has been developed by Quarter 1 of 2023	Plan	Planning to be approved
B.3	Organize a study tour to NPs and NRs inbound	A 3-day study tour with participation of 15 people to NPs and NRs inbound has been organized by Quarter 2 of 2023	Study tour (Combined with M.2)	Trainees have been improved capacity

Objective 2	To assess the climate change and social impacts on CTNP biodiversity and integrated management measures, improve management and conservation capacities of project stakeholders, and to engage local communities for forest management and protection	The climate change and social impacts on CTNP biodiversity in recent 5 years has been assessed, project stakeholders' management and conservation capacities have been improved, and local communities have been engaged in forest management and protection.	Report and verified data	Data collection systematic in recent 5 years
Output 3	Assess the climate change and social impacts to the biodiversity of CTNP	An assessment report on current status of climate change and social impacts on CTNP biodiversity in recent 5 years has been produced.	Reports and verified data	Data collection systematic in recent 5 years
C.1	Collect and analyze secondary data on climate change and social impacts on biodiversity of CTNP	Data on climate change and social impacts on CTNP has been collected and analyzed two times by end of 2021 and 2023. Two reports on collected data have been accordingly produced.	Report	Report to be approved
C.2	Conduct survey and assessment of climate change and social impacts to CTNP biodiversity	Climate change and social impacts on CTNP biodiversity have been surveyed and assessed and an assessment report on climate change and social impacts to CTNP biodiversity has been produced by Quarter 4 of 2021	Report	Report to be approved
C.3	Develop a database of climate change and social impacts to CTNP biodiversity	A database (format and content) of climate change and social impacts to CTNP biodiversity has been developed by Quarter 1 2022	Database	Report and Database to be approved
Output 4	Organize training on climate change and social impacts for people and local authorities in the buffer zone	Based on a set of developed training documents, 5 training courses on climate change and social impacts for local authorities and people in the buffer zone have been organized every year with the participation of 30 trainees per course.	Report. Evaluation paper	Trainees have improved capacity
D.1	Assess the needs of biodiversity training for local authorities and people	An assessment report on the needs of biodiversity training for local authorities and people has been produced by Quarter 4 of 2021.	Report with recommendations	Report to be approved
D.2	Develop training materials and invite experts	A set of materials used in training with high qualified experts has been developed by Quarter 4 of 2021.	Set	Material to be approved
D.3	Organize training courses for local authorities and people in the buffer zone of 3 communes Phuoc Cat 2, Dac Lua and Nam Cat Tien	Five training courses for local authorities and people in the buffer zone of 3 communes (Phuoc Cat 2, Dac Lua and Nam Cat Tien) have been organized every year with participation of 30 trainees per course, of which at least 30% of trainees are female.	Course	Trainees have been improved capacity
Output 5	Implement measures and solutions to minimize negative impacts of climate change and social impacts at Cat Tien National Park (i.e. improving the habitat of Ramsar-Crocodile Lake and neighboring wetland).	Measures and solutions to minimize the negative impacts of climate change and social impacts to CTNP have been implemented every year.	Proposed solutions have been verified	Improved Ramsar-Crocodile Lake and neighboring wetland habitat
E.1	Assess solutions to minimize negative impacts of climate change and social	An assessment report on solutions to minimize the negative impacts of climate change and social impacts on CTNP has been produced by Quarter 4 of 2021.	Report	Report to be approved

	impacts on Cat Tien National Park by consultants.			
E.2	Choose the appropriate solutions	A consultation workshop on the selection of appropriate solutions to minimize the negative impacts of climate change and social impacts to CTNP has been organized by Quarter 4 of 2021	Workshop	The workshop has been approved
E.3	Improve habitat of Ramsar-Crocodile Lake	5ha of habitat of Ramsar-Crocodile Lake has been improved every year.	Ha/year	Habitat has been improved
E.4	Control <i>Mimosa pigra</i> at Bird Lake	10ha of <i>Mimosa pigra</i> at Bird Lake has been controlled every year.	Ha/year	Habitat has been improved
E.5	Improve grassland for ungulate in Nui Tuong	50ha of grassland for ungulate in Nui Tuong has been improved every year	Ha/year	Habitat has been improved
Output 6	Enhance local communities' capacity to adapt with climate change and social impacts (i.e. changing cultivation methods, and practices for local people in buffer zone to adapt to climate change)	Based on a set of developed training documents, two training courses for local communities with the participation of at least 80 households on adaptation of climate change and social impacts have been organized in 2022 and 2023.	Report, Workshop	Local people to be trained on adapt with climate change and social impacts
F.1	Assess the needs of capacity building for local communities to adapt to climate change and social impacts	An assessment report on the needs of training for local communities on adaptation of climate change and social impacts has been produced by Quarter 4 of 2021.	Report	Report to be approved
F.2	Develop training materials and invite experts	A set of materials used in training with high qualified experts has been developed by Quarter 1 and Quarter 2 of 2022.	Set	Materials have been approved
F.3	Organize training courses on capacity building for local communities to adapt to climate change and social impacts	Two training courses for local communities with participation of at least 80 households on adaptation of climate change and social impacts have been organized in Q 4 of 2022 and Q 1 of 2023.	Course	Trainees have been improved capacity
Output 7	Develop a model of planting Golden Camellia (<i>Camellia spp.</i>)	A 5-ha model of planting Golden Camellia in Nui Tuong with a plantation of 1.200 trees (240 trees per ha) has been developed and maintained annually.	Collected data are verified	Standard model
G.1	Survey the potential and situation to build a model of planting Golden Camellia	A report on surveying potential and situation to build a model of planting Golden Camellia has been produced by Quarter 4 of 2021.	Report	Report and suggestions are feasible
G.2	Develop a technical plan for planting and maintaining a model of Golden Camellia plantation	A technical plan for planting and maintaining a model of the Golden Camellia plantation has been developed by Quarter 4 of 2021.	Plan	Providing adequate budget, available technicians, well experts.
G.3	Develop and maintain plantation a model for the first 5 years	A 5-ha model of planting Golden Camellia in Nui Tuong with a plantation of 1.200 trees (240 trees per ha) has been developed in 2021 and maintained from 2022 to 2025.	Model	High-quality seedling has been selected, planting meets the technical requirements, providing adequate budget

G.4	Conduct fire prevention and anti-pests and diseases in the first 4 years	Fire prevention and anti-pests and diseases have been conducted in the plantation model of Golden Camellia for 4 years from 2021 to 2025.	Year	Comply with fire prevention and pest control procedures, timely detection and intervention
G.5	Develop product branding	From 2023 to 2025, a brand of Golden Camellia has been developed and labeled in accordance with domestic legal regulations (marketing research in 2023; Label register in 2024; advertising in 2025)	Product	Products to be promoted
Output 8	Collect orchids (Orchidaceous) and set up a greenhouse for orchid genus resource conservation at CTNP.	At least 50 local orchid species have been collected and a greenhouse for orchid genus resource conservation at CTNP has been set up and maintained	Report	Plant and maintain according to current standards. Greenhouse meets technical standards
H.1	Survey potential and situation to build an orchid collection model	A report on surveying potential and situation to build an orchid collection model has been produced by Quarter 3 and Quarter 4 of 2021.	Report	Reports and suggestions are feasible
H.2	Conduct inventory and collection of local orchids species	At least 50 local orchid species have been inventoried and collected in 2021 and 2022. (25 species in 2021 and 25 species in 2022)	Species	Trainees have improved capacity
H.3	Design and build a system of orchid greenhouses and the grid house	A system of orchid greenhouses and grid houses has been designed and built by Quarter 4 of 2022.	System	Effective model
H.4	Purchase equipment and supplies for the greenhouse system	A set of equipment and supplies for the greenhouse system has been purchased in 2022 and 2023.	Set	Effective materials
H.5	Maintain greenhouse system	The greenhouse system has been maintained for 4 years from 2022 to 2025.	Year	Effective maintenance
Output 9	Develop supporting documents, materials, and tools to improve conservation capacity.	Supporting documents, materials, and tools to improve conservation capacity have been developed, published, and circulated to stakeholders in 2022.	Documents, materials, and tools appraised by scientists, experts	Local communities collaborate with CTNP in forest management and protection. Number of violations was reduced.
I.1	Prepare a plan supporting documents, materials and tools (patrolling, wildlife monitoring, educating communities in forest protection, handling violators and handbooks for rangers and communities) to improve conservation capacity	A plan for supporting documents, materials and tools (patrolling, wildlife monitoring, educating communities in forest protection, handling violators and handbooks for rangers and communities) to improve conservation capacity has been prepared by Quarter 1 of 2022.	Plan	Planning to be approved
I.2	Contract experts	Two experts have been contracted by Quarter 1 of 2022 to prepare supporting documents, materials and tools to improve conservation capacity.	Person	Contract to be approved
I.3	Compile documents and materials	A set of supporting documents, materials and tools has been compiled by Quarter 4 of 2022.	Set	Documents to be approved
I.4	Organize workshop on reviewing documents	A workshop on reviewing supporting documents, materials and tools has been organized in Quarter 1 of 2023.	Workshop	Workshop to be approved

I.5	Submit supporting documents and materials to the competent authority for censoring and licensing	By Quarter 4 of 2022, supporting documents and materials have been censored and licensed by the competent authority before being printed and circulated.	Time	Legal document
I.6	Design, print, publish, circulate supporting documents and materials	One set of documents with fifty (50) copies of supporting documents and materials have been designed, printed, published and circulated by Quarter 1 and 2 of 2024.	set	Legal document
Output 10	Organize training on forest protection skills associated with biodiversity monitoring, focusing on water birds, Phasianidae, Hornbills, large mammals, and small carnivores. Monitor some rare species by remote sensing technology by consultants, and monitor key species by CTNP	Two training courses on forest protection skills associated with biodiversity monitoring have been organized in 2021. At least 5 key species, focusing on water birds, Phasianidae, Hornbills, large mammals, and small carnivores, have been monitored yearly using remote sensing technology.	Annual monitoring, Report, and verified data	Technicians trained and key species. regularly monitored
J.1	Assess training needs	An assessment report on the needs of training on forest protection skills associated with biodiversity monitoring has been produced by Quarter 3 of 2021.	Report	Technicians trained and key species. regularly monitored
J.2	Develop training materials and invite experts	A set of materials used in training with high qualified experts has been developed by Quarter 3 of 2021.	Set	Technicians trained and key species. regularly monitored
J.3	Organize training courses	Two training courses on forest protection skills associated with biodiversity monitoring have been organized in Quarter 3 of 2021 with the participation of 30 trainees per course.	Course	Technicians trained and key species. regularly monitored
J.4	Monitor key species	At least 5 key species, focusing on water birds, Phasianidae, Hornbills, large mammals, and small carnivores, have been monitored yearly using remote sensing technology and annual monitoring reports have been produced accordingly.	Report	Technicians trained and key species. regularly monitored
Output 11	Organize training on forest patrolling, use of patrol equipment (maps, compass, GPS). Develop plans and methods for patrolling, skills of communication and education, management of violators in the community. The participants would be Park's rangers and scientific staff.	Four (4) training courses on forest patrolling and protection, skills of using equipment for rangers have been organized in 2021 and 2022.	Report and verified data	Rangers trained; violations monitored
K.1	Assess and survey the needs of training on forest protection patrol, skills of using equipment for rangers	An assessment report on the needs of training on forest protection patrol, skill of using equipment for forest rangers has been produced by Quarter 4 of 2021.	Report	Reports, suggestions are feasible
K.2	Develop training materials and invite experts	A set of materials used in training with high qualified experts has been developed from Quarter 1 to Q 3 of 2022.	Set	Trainees have been improved capacity

K.3	Organize the training courses on forest patrolling and protection, skills of using equipment for rangers	Two training courses on forest patrolling and protection, skills of using equipment for rangers have been organized in Quarter 4 of 2022 with the participation of 30 trainees per course.	Course	Trainees have been improved capacity
K.4	K.4. Organize training courses on developing forest protection patrolling plan and method, communication education skills, management of violators in the community.	Two training courses on forest patrolling and protection, skills of using equipment for rangers have been organized in Quarter 4 of 2022 with the participation of 30 trainees per course	Course	Trainees have been improved capacity
Output 12	Develop coordination regulations on forest protection with local authorities, sign commitments on forest protection with households (without community forest protection committee establishment)	By 2021, coordination regulations on forest protection have been developed and 100% of communes (32 communes) at the buffer zone have signed forest coordination regulations with the park and at least 70% of households in communes have signed commitments on forest protection.	Coordination regulations, commitment paper signed	Coordination regulations, commitment paper signed
L.1	Review and update coordination regulations on forest protection, contents of cooperation with local authorities and commitments of HH	A report on reviewing and updating coordination regulations on forest protection, contents of cooperation with local authorities and commitments of households has been produced by Quarter 4 of 2021.	Report	Reports, suggestions are feasible
L.2	Finalize coordination regulations on forest protection, contents of cooperation with local authorities and commitments of HH	By Quarter 4 of 2021, 100% of communes (32 communes) at the buffer zone have signed coordination regulations on forest protection with the park and at least 70% of households in communes have signed a commitment on forest protection.	Commune	Reports, suggestions are feasible
L.3	Disseminate coordination regulations on forest protection	By Quarter 1 of 2022, coordination regulations on forest protection have been disseminated to 100% of districts (8 districts).	District	Reports, suggestions are feasible
L.4	Implement and evaluate coordination regulations, commitments of HH	Coordination regulations and commitments of households have been implemented and evaluated every year. By 2025, a final evaluation report has been produced.	Report	Reports, suggestions are feasible
Output 13	Study tours and workshop inbound and outbound to NPs, NRs Participants would be the Park's staff and Leaders of communes, districts.	By 2025, through a number of study tours to NPs, NRs inbound and outbound, an assessment report on economic development potential engaged with biodiversity conservation has been produced.	Report	Economic potential developed
M.1	Select locations and prepare plan for study tours	A report on the selection of locations and preparation of plan for study tours has been produced by Quarter 4 of 2021.	Report	Reports, and suggestions are feasible
M.2	Organize study tours to NPs, NRs inbound	Two trips to NPs, NRs inbound have been organized in 2022 and 2023 with the participation of 20 people per trip.	Trip	Trainees have improved capacity
M.3	Organize study tours to NPs, NRs outbound	Two trips to NPs, NRs outbound have been organized in 2022 and 2023 with the participation of 20 people per trip.	Trip	Trainees have improved capacity

Objective 3	To conduct piloting of models for sustainable livelihood improvement of communities in the buffer zone	By 2025, three models for sustainable livelihood improvement of communities in the buffer zone have been set up and duplicated.	Compare the income of HH before and after the project	Local people have high income, good livelihoods
Output 14	Survey and assess the benefits and potentials of economic development in the future of the Park and local community	In 2023, a report on surveying and assessing the benefits and potentials of economic development in the future of the Park and local community has been produced.	Report	Reports, and suggestions are feasible
N.1	Develop a plan for surveying and assessing the benefits and potentials of economic development in the future of the park and local community	A plan for surveying and assessing the benefits and potentials of economic development in the future of the park and local community has been developed in Quarter 4 of 2021.	Plan	Reports, and suggestions are feasible
N.2	Conduct survey and assessment	A report on surveying and assessing the benefits and potentials of economic development in the future of the park and local community has been produced by Quarter 4 of 2022.	Report	Reports, suggestions are feasible
Output 15	Identify economic benefits of biodiversity conservation engaged with improving livelihoods for local people in the buffer zone. Participants would be community members. They would participate the workshops, meetings for decision making (both of planning and implementing)	A report on identification of economic benefits of biodiversity conservation engaged with improving livelihoods for local people in the buffer zone has been produced in 2022.	Verified data	Economic benefits identified and developed
O.1	Consult technical experts on identifying economic benefits of biodiversity conservation engaged with improving livelihoods for local people in the buffer zone	By Quarter 4 of 2021, at least 5 domestic experts and 3 foreign experts have been consulted to identify economic benefits of biodiversity conservation engaged with improving livelihoods for local people in the buffer zone.	Expert	Reports, suggestions are feasible
O.2	Organize workshop on identifying economic benefits of biodiversity conservation engaged with improving livelihoods for local people in the buffer zone	By Quarter 3 of 2022, two workshops on identifying economic benefits of biodiversity conservation engaged with improving livelihoods for local people in the buffer zone have been organized.	Workshop	Reports, suggestions are feasible
Output 16	Support the planting, maintenance and marketing of high-value tree crops (cashew-nut, durian, avocado) to help improve the livelihoods of ethnic minorities in Village 3 and Village 4 of Phuoc Cat 2 commune	20 ha of high-value trees (cashew-nut, durian, avocado) have been supported to help improve livelihoods of at least 50 households of ethnic minorities in Village 3 and Village 4 of Phuoc Cat 2 Commune.	Verified data	Economic benefits identified and developed

P.1	Using PRA methodology for identification of locations and participants and profiling. Support high-value trees to help improve livelihoods of ethnic minorities Village 3 and Village 4, Phuoc Cat 2 Commune	By Quarter 4 of 2021, 20 ha of high-value trees (cashew-nut, durian, avocado) have been supported to help improve livelihoods of at least 50 households of ethnic minorities in Village 3 and Village 4 of Phuoc Cat 2 Commune.	Ha	Reports, suggestions are feasible
P.2	Organize training on skills and knowledge for HH on planting and maintaining techniques, sustainable production development, clean agricultural production of specific local products, associated with CBT	Two training courses on skills and knowledge for HH on planting and maintaining techniques, sustainable production development, clean agricultural production of specific local products, associated with CBT have been organized in Quarter 1 of 2022 with the participation of at least 50 households.	Course	Trainees have been improved capacity
P.3	Support marketing of high-value agricultural products through supply demand conferences, fairs, exhibitions, and consideration of consumption patterns of agricultural products in the provinces.	By Quarter 1 of 2025, marketing of high-value agricultural products has been supported through supply demand conferences, fairs, exhibitions in 3 sites of the district and 5 sites of Da Lat city, Lam Dong province and through website.	Site	Reports, suggestions are feasible
Output 17	Plan and establish intensive grazing pastures management for ethnic minority in Village 7, Dac Lua commune, Tan Phu district, Dong Nai province	At least 5 ha of intensive grazing pastures has been set up and managed in Village 7, Dac Lua Commune, Tan Phu District, Dong Nai province.	Selected sites near water sources, grazing, number of cattle	Stable and long-term grazing pastures
Q.1	Identify the grazing pasture's location and community participant profiling	5 ha of grazing pasture's location has been identified by Quarter 4 of 2021.	Ha	Reports, suggestions are feasible
Q.2	Choose to purchase the grasses varieties, set up and manage grazing pastures	Grass varieties have been purchased by Quarter 2 of 2022 to set up and manage 5 ha of grazing pasture.	Ha	Reports, suggestions are feasible
Q.3	Support HH to change the model of cattle grazing	In 2022, at least 20 households have been supported to change the mode of cattle grazing.	Household	Reports, suggestions are feasible
Output 18	Develop and promote homestay model in Nam Cat Tien commune, Tan Phu district, Dong Nai province in accordance with local customs and practices as a tourism-based alternative livelihood	A successful homestay model in Nam Cat Tien commune, Tan Phu district, Dong Nai province in accordance with local customs and practices as a tourism-based alternative livelihood has been developed and duplicated to other potential communes.	Compare income of HH before and after project	Local people have higher income, good livelihoods
R.1	Assess the needs of training on CBT knowledge and skills for HHs and local guiders	An assessment report on the needs of training on CBT knowledge and skills for households and local guiders has been produced by Quarter 4 of 2021.	Report	Reports, suggestions are feasible
R.2	Develop training materials and invite experts	A set of materials used in training with high qualified experts has been developed by Quarter 1 of 2022.	Set	Trainees have been improved capacity

R.3	Based on the homestay households available for selection and participants. Organize training courses on CBT knowledge and skills for HHs and local guiders	Two training courses on CBT knowledge and skills, one for 20 households and one for 20 local guiders, have been organized in Quarter 3 of 2022.	Report and recommendation	Trainees have been improved capacity
R.4	Support the homestay model suitable to the customs of the local people	Six homestay models suitable to the customs of local people has been supported 02 models in 2022; 02 models in 2023 and 02 models in 2024	Model	Households' income improved
R.5	Cooperate and associate with CTNP, domestic and foreign enterprises Tour Operators	From 2022 to 2025, CTNP has cooperated and signed 10 contracts with 5 households and 2 tour operators. (3 contracts in 2022; 3 contracts in 2023; 2 contracts in 2024 and 2 contracts in 2025)	Contract	Households' income improved
R.6	Replicate the model to other potential communes	From 2024 to 2025, the homestay model has been replicated to Ta Lai commune.	Model	Households' income improved
	Project management			
	CTNP has 90 km length Dong Nai River as a natural boundary. We should purchase the moto boat and water motor bike for patrolling. Motorboat (one motorboat with engine).	A set of a motorboat with engine will be purchased by Quarter 4 of 2021	Set	Forest patrolling capacity has been improved
	Water motorbike	One (01) Water motorbike will be purchased in Quarter 2 and Q3 of 2022.	Set	Forest patrolling capacity has been improved
	Fly Camera	Four (04) Fly Camera (drone) will be purchased in Quarter 4 of 2021.	Set	Forest patrolling capacity has been improved
	Motorbike	Seven (07) Motorbike will be purchased in 2021	Set	Forest patrolling capacity has been improved

Annex II: Details of Completed Activities

Narrative		Objectively Verifiable Indicators	Status of Completion	Remark
Overall objective: To improve the conservation and development of forest ecosystems biodiversity resources at CTNP engaged with sustainable livelihood improvement for communities in the buffer zone.				
Objective 1: To improve knowledge and information sharing on biodiversity of forest ecosystems of the Park for local managers and policy makers				
<i>Output 1: Training, sharing knowledge, experiences and skills on biodiversity conservation to the Province, District, Commune Officers</i>				
A.1	Assess the needs of biodiversity training for local policy makers and managers	At least 30 staff/agency from the DONRE, DARD, DOST of Dong Nai, Lam Dong provinces have been interviewed and an assessment report on the needs of biodiversity training for local policy makers and managers has been produced by Quarter 2 of 2022	Overachieved	180 staff of DONRE, DARD, DOST of 2 provinces of Dong Nai, Lam Dong have been interviewed
A.2	Develop training materials and invite experts based on results of needs assessment	A set of materials used in training with high qualified experts has been developed by Quarter 4 of 2021	Achieved as planned	A set of Training Materials developed
A.3	Organize training courses for staff of DONRE, DARD, DOST of 2 provinces of Dong Nai, Lam Dong, districts and communes in the buffer	Two training courses for staff of DONRE, DARD, DOST of Dong Nai, Lam Dong provinces, district and communes have been organized in Quarter 3 of 2022 and Quarter 2 of 2023, respectively, with 52 people per course.	Achieved as planned	2 training courses for 75 students including Dong Nai, Lam Dong provinces, national parks (Cat Tien, Bi Dup Nui Ba, Lo Go - Xa Mat).
<i>Output 2: Study tour in national parks and protected areas inbound and outbound</i>				
B.1	Assess the needs and plan of study tour	At least 15 staff of the DONRE, DARD, DOST of Dong Nai, Lam Dong provinces and 80% of district and commune leaders in the buffer zone have been interviewed and an assessment report on the needs and plan of study tour has been produced by Quarter 1 of 2023	Achieved after modification	A study tour plan

B.2	Develop a study tour plan	A study tour plan has been developed by Quarter 1 of 2023	Overachieved	2 study tours for CTNP staff, VNFOREST, Tan Phu district Leaders to Con Dao, Cuc Phuong and Phong Nha - Ke Bang NP.
B.3	Organize a study tour to NPS and NRs inbound	A 3-day study tour with participation of 15 people to NPs and NRs inbound has been organized by Quarter 2 of 2023	<i>Combined with M.2</i>	2 study tours for CTNP staff, VNFOREST, Tan Phu district Leaders to Con Dao, Cuc Phuong and Phong Nha - Ke Bang NP.
Objective 2: To assess the climate change and social impacts on CTNP biodiversity and integrated management measures, improve management and conservation capacities of project stakeholders, and to engage local communities for forest management and protection				
<i>Output 4: Organize training on climate change and social impacts for people and local authorities in the buffer zone</i>				
D.1	Assess the needs of biodiversity training for local authorities and people	An assessment report on the needs of biodiversity training for local authorities and people has been produced by Quarter 4 of 2021.	Achieved as planned	Interviewed 195 people, including 30 staff from the Cat Tien DPC, 30 officers Tan Phu DPC, 45 Leader and 90 local staff from Dak Lua, Nam Cat Tien, Phuoc Cat 2
D.2	Develop training materials and invite experts	A set of materials used in training with high qualified experts has been developed by Quarter 1 of 2022.	Achieved as planned	A set of materials used
D.3	Organize training courses for local authorities and people in the buffer zone of 3 communes Phuoc Cat 2, Dac Lua and Nam Cat Tien	Five training courses for local authorities and people in the buffer zone of 3 communes (Phuoc Cat 2, Dac Lua and Nam Cat Tien) have been organized every year with participation of 30 trainees per course, of which at least 30% of trainees are female.	Achieved as planned	Five training courses*30 trainees/course, of which at least 30% of trainees are female.
<i>Output 6: Enhance local communities' capacity to adapt with climate change and social impacts (i.e., changing cultivation methods, practices for local people in buffer zone to adapt to climate change)</i>				
F.1	Assess the needs of capacity building for local communities to adapt to climate change and social impacts	An assessment report on the needs of training for local communities on adaptation of climate change and social impacts has been produced by Quarter 4 of 2021.	Achieved as planned	Interviewed 45 people from CPC (15 people*3 commune), 90 local people (30 people*3

F.2	Develop training materials and invite experts	A set of materials used in training with high qualified experts has been developed by Quarter 1 and Quarter 2 of 2022.	Achieved as planned	Two training courses for 75 trainees including Dong Nai, Lam Dong provinces, national parks (Cat Tien, Bi Dup Nui Ba, Lo Go - Xa Mat).
F.3	Organize training courses on capacity building for local communities to adapt to climate change and social impacts	Two training courses for local communities with participation of at least 80 households on adaptation of climate change and social impacts have been organized in Q 4 of 2022 and Q 1 of 2023.	Achieved as planned	2 training courses for 86 trainees including Nam Cat Tien and Phuoc Cat 2
<i>Output 7: Develop a model of planting Golden Camellia (Camellia spp.)</i>				
G.1	Survey the potential and situation to build a model of planting Golden Camellia	A report on surveying potential and situation to build a model of planting Golden Camellia has been produced by Quarter 4 of 2021.	Achieved as planned	5 species of Camellia have been identified (<i>Camellia dormoyana</i> , <i>C. luteocerata</i> , <i>C. cattienensis</i> , <i>C. capitata</i> , <i>C. sinensis</i>).
G.2	Develop a technical plan for planting and maintaining model of Golden Camellia plantation	A technical plan for planting and maintaining model of Golden Camellia plantation has been developed by Quarter 4 of 2021.	Achieved after modification	625 trees/ha. In which, 385 trees/ha planted available (not including 175 low viability trees). New planting 240 trees/ha funded by AFoCO.
<i>Output 8: Collect orchids (Orchidaceae) and set up a greenhouse for orchid genus resource conservation at CTNP.</i>				
H.1	Survey potential and situation to build an orchid collection model	A report on surveying potential and situation to build an orchid collection model has been produced by Quarter 3 and Quarter 4 of 2021.	Overachieved	Surveyed 80 species of wild orchids, of which 70 species have been identified, 10 species have not yet been identified.
H.2	Conduct inventory and collection of local orchids species	At least 50 local orchid species have been inventoried and collected in 2021 and 2022. (25 species in 2021 and 25 species in 2022)	Achieved after modification	Collected 35 species of wild orchids with 298 planted in 2022
<i>Output 10: Organize training on forest protection skills associated with biodiversity monitoring, focusing on waterbirds, Phasianidae, Hornbills, large mammals, and small carnivores. Monitor some rare species by remote sensing technology by consultants, and monitor key species by CTNP</i>				
J.1	Assess training needs	An assessment report on the needs of training on forest protection skills associated with biodiversity monitoring has been produced by Quarter 3 of 2021.	Achieved as planned	Interviewed 101 people, including 13 managers and 42 forest rangers of CTNP, and 46 representatives of community forest protection teams and

J.2	Develop training materials and invite experts	A set of materials used in training with high qualified experts has been developed by Quarter 1 of 2022.	Achieved as planned	A set of materials
J.3	Organize training courses	Two training courses on forest protection skills associated with biodiversity monitoring have been organized in Quarter 3 of 2021 with the participation of 30 trainees per course.	Overachieved	2 training courses (03 days*30 students/course) for 58 staff. The course provides knowledge and practice skills to survey and monitor endangered wildlife Using automatic recorders, camera traps, drones, binoculars, cameras, monitoring equipment radio telemetry, etc. Application of data analysis software including QGIS, ArcGIS, MapInfo, SMART, RAVEN.
<i>Output 11: Organize training on forest patrolling, use of patrol equipment (maps, compass, GPS). Develop plans and methods for patrolling, skills of communication and education, management of violators in the community. The participants would be Park's rangers and scientific staff.</i>				
K.1	Assess and survey the needs of training on forest protection patrol, skills of using equipment for rangers	An assessment report on the needs of training on forest protection patrol, skill of using equipment for forest rangers has been produced by Quarter 4 of 2021.	Overachieved	101 people were interviewed, including 13 Park managers, 42 rangers, 46 from community forest patrol groups
K.2	Develop training materials and invite experts	A set of materials used in training with high qualified experts has been developed from Quarter 1 to Q 3 of 2022.	Achieved as planned	Handbook of environmental education communication
K.3	Organize the training courses on forest patrolling and protection, skills of using equipment for rangers	Two training courses on forest patrolling and protection, skills of using equipment for rangers have been organized in Quarter 4 of 2022 with the participation of 30 trainees per course.	Overachieved	Two training courses on forest patrolling, 76 trainees
K.4	Organize training courses on developing forest protection patrolling plan and method, communication education skills, management of violators in the community.	Two training courses on forest patrolling and protection, skills of using equipment for rangers have been organized in Quarter 4 of 2022 with the participation of 30 trainees per course	Achieved after modification	Two training courses on forest patrolling, 51 trainees
<i>Output 12: Develop coordination regulations on forest protection with local authorities, sign commitments on forest protection with households (without community forest protection committee establishment)</i>				

L.1	Review and update coordination regulations on forest protection, contents of cooperation with local authorities and commitments of HH	A report on reviewing and updating coordination regulations on forest protection, contents of cooperation with local authorities and commitments of households has been produced by Quarter 4 of 2021.	Achieved as planned	Collected relevant documents, data and legal documents. Review and update regulations on coordination in forest protection between forest rangers and local authorities in communes.
L.2	Finalize coordination regulations on forest protection, contents of cooperation with local authorities and commitments of HH	By Quarter 4 of 2021, 100% of communes (32 communes) at the buffer zone have signed coordination regulations on forest protection with the park and at least 70% of households in communes have signed commitment on forest protection.	Achieved after modification	Only have 22 communes and 2,000 HH. (There are about 30,000 HH in buffer zone. Only selected 2,000 HH adjacent the park boundary)
L.3	Disseminate coordination regulations on forest protection	By Quarter 1 of 2022, coordination regulations on forest protection have been disseminated to 100% of districts (8 districts).	Achieved after modification	6 districts, absence of 2 districts
<i>Output 13: Study tours and workshop inbound and outbound to NPs, NRs Participants would be Park's staff and Leaders of communes, districts.</i>				
M.1	Select locations and prepare plan for study tours	A report on selection of locations and preparation of plan for study tours has been produced by Quarter 4 of 2021.	Achieved as planned	A report
M.2	Organize study tours to NPs, NRs inbound	Two trips to NPs, NRs inbound have been organized in 2022 and 2023 with the participation of 20 people per trip.	Achieved after modification	2 trips to NPs, NRs, 15 people per/ trip at Con Dao, 15 people per/ trip at Cuc Phuong and Phong Nha - Ke Bang NP.
M.3	Organize study tours to NPs, NRs outbound	Two trips to NPs, NRs outbound have been organized in 2022 and 2023 with the participation of 20 people per trip.	Achieved after modification	1 trip, 14 people per/ trip at ROK
Objective 3: To conduct piloting of models for sustainable livelihood improvement of communities in the buffer zone				
<i>Output 14: Survey and assess the benefits and potentials of economic development in the future of the park and local community</i>				
N.1	Develop a plan for surveying and assessing the benefits and potentials of economic development in the future of the park and local community	A plan for surveying and assessing the benefits and potentials of economic development in the future of the park and local community has been developed in Quarter 4 of 2021.	Achieved as planned	Collected the second data on the biodiversity in the Park, economic characteristics of 5 communes (Ta Lai, Nam Cat Tien, Dac Lua, Dong Nai Thuong and Phuoc Cat 2).

N.2	Conduct survey and assessment	A report on surveying and assessing the benefits and potentials of economic development in the future of the park and local community has been produced by Quarter 4 of 2022.	Achieved as planned	In-depth interviews with leaders and 150 households. Analyze the economic efficiency of the models
<i>Output 15: Identify economic benefits of biodiversity conservation engaged with improving livelihoods for local people in the buffer zone. Participants would be community members. They would participate the workshops, meetings for decision making (both of planning and implementing)</i>				
O.1	Consult technical experts on identifying economic benefits of biodiversity conservation engaged with improving livelihoods for local people in the buffer zone	By Quarter 4 of 2021, at least 5 domestic experts and 3 foreign experts have been consulted to identify economic benefits of biodiversity conservation engaged with improving livelihoods for local people in the buffer zone.	Overachieved	Consulted 18 national and 3 foreign experts on: biodiversity conservation; biodiversity conservation associated with forest environmental services; biodiversity conservation associated with livelihood development
O.2	Organize workshop on identifying economic benefits of biodiversity conservation engaged with improving livelihoods for local people in the buffer zone	By Quarter 3 of 2022, two workshops on identifying economic benefits of biodiversity conservation engaged with improving livelihoods for local people in the buffer zone have been organized.	Achieved as planned	2 workshops offline and online.
<i>Output 16: Support the planting, maintenance and marketing of high-value tree crops (cashew-nut, durian, avocado) to help improve the livelihoods of ethnic minorities in Village 3 and Village 4 of Phuoc Cat 2 commune</i>				
P.1	Using PRA methodology for identification of locations and participants and profiling. Support high-value trees to help improve livelihoods of ethnic minorities Village 3 and Village 4, Phuoc Cat 2 Commune	By Quarter 1 of 2022, 20 ha of high-value trees (cashew-nut, durian, avocado) have been supported to help improve livelihoods of at least 50 households of ethnic minorities in Village 3 and Village 4 of Phuoc Cat 2 Commune.	Overachieved	51 HH and 29,5 ha planting of cashew-nut, durian, avocado.
P.2	Organize training on skills and knowledge for HH on planting and maintaining techniques, sustainable production development, clean agricultural production of specific local products, associated with CBT	Two training courses on skills and knowledge for HH on planting and maintaining techniques, sustainable production development, clean agricultural production of specific local products, associated with CBT have been organized in Quarter 1 of 2022 with the participation of at least 50 households.	Achieved as planned	2 training courses for 23 HH for grazing pasture, 1 training course for 50 HH for planting cashew nut, durian and avocado.
<i>Output 17: Plan and establish intensive grazing pastures management for ethnic minority in Village 7, Dac Lua commune, Tan Phu district, Dong Nai province</i>				
Q.1	Identify the grazing pasture's location and community participant profiling	5 ha of grazing pasture's location has been identified by Quarter 1 of 2022.	Achieved as planned	23 HH, 5 ha

Q.2	Choose to purchase the grasses varieties, set up and manage grazing pastures	Grass varieties have been purchased by Quarter 2 of 2022 to set up and manage 5 ha of grazing pasture.	Achieved as planned	23 HH, 5 ha
Q.3	Support HH to change the model of cattle grazing	In 2022, at least 20 households have been supported to change the mode of cattle grazing.	Overachieved	23 Household
<i>Output 18: Develop and promote homestay model in Nam Cat Tien commune, Tan Phu district, Dong Nai province in accordance with local customs and practices as a tourism-based alternative livelihood</i>				
R.1	Assess the needs of training on CBT knowledge and skills for HHs and local guiders	An assessment report on the needs of training on CBT knowledge and skills for households and local guiders has been produced by Quarter 4 of 2021.	Achieved as planned	Interviewed 41 HH for 3 communes (1) Ta Lai: 02 commune staff, 19 HH; (2) Dac Lua: 02 commune staff, 05 HH; (3) Nam Cat Tien 01 commune staff and 12 HH.
R.2	Develop training materials and invite experts	A set of materials used in training with high qualified experts has been developed by Quarter 1 of 2022.	Achieved as planned	A set of materials
R.3	Based on the homestay householders available for selection and participants. Organize training courses on CBT knowledge and skills for HHs and local guiders	Two training courses on CBT knowledge and skills, one for 20 households and one for 20 local guiders, have been organized in Quarter 3 of 2022.	Overachieved	Two training courses in which 1 course for 20 HH and 1 course for 20 local guiders Park managers, 42 rangers, 46 from community forest patrol groups

Annex III: Status of Ongoing Activities

Narrative		Objectively Verifiable Indicators	Status of Ongoing - Ongoing as planned - Delayed/Pending	Status as of S1-2023
<i>Overall objective: To improve the conservation and development of forest ecosystems biodiversity resources at CTNP engaged with sustainable livelihood improvement for communities in the buffer zone.</i>				
Objective 2: To assess the climate change and social impacts on CTNP biodiversity and integrated management measures, improve management and conservation capacities of project stakeholders, and to engage local communities for forest management and protection				
<i>Output 3: Assess the climate change and social impacts to the biodiversity of CTNP</i>				
C.1	Collect and analyze secondary data on climate change and social impacts on biodiversity of CTNP	Data on climate change and social impacts on CTNP has been collected and analyzed two times by end of 2021 and 2023. Two reports on collected data have been accordingly produced.	Ongoing as planned	Data collected from the statistical yearbook of Tan Phu district. Collected socio-economic data in the last 10 years of 3 communes Ta Lai, Nam Cat Tien and Dac Lua
C.2	Conduct survey and assessment of climate change and social impacts to CTNP biodiversity	Climate change and social impacts on CTNP biodiversity have been surveyed and assessed and an assessment report on climate change and social impacts to CTNP biodiversity has been produced by Quarter 4 of 2021	Ongoing as planned	Interviewed 19 people from Ta Lai, 12 people from Nam Cat Tien, 5 people from Dak Lua; Field survey on socio-economic development, cultivation, fisheries, afforestation
C.3	Develop a database of climate change and social impacts to CTNP biodiversity	A database (format and content) of climate change and social impacts to CTNP biodiversity has been developed by Quarter 1 2022	Ongoing as planned	Use the free software QGIS. Due to limited budget, do not buy specialized software
<i>Output 5: Implement measures and solutions to minimize negative impacts of climate change and social impacts at Cat Tien National Park (i.e., improving the habitat of Ramsar-Crocodile Lake and neighboring wetland).</i>				
E.1	Assess solutions to minimize negative impacts of climate change and social impacts on Cat Tien National Park by consultants.	An assessment report on solutions to minimize negative impacts of climate change and social impacts on CTNP has been produced by Quarter 1 of 2022.	Ongoing as planned	A draft report
E.2	Choose the appropriate solutions	A consultation workshop on selection of appropriate solutions to minimize negative impacts of climate change and social impacts to CTNP has been organized by Quarter 1 of 2022	Ongoing as planned	A draft report
E.3	Improve habitat of Ramsar-Crocodile Lake	5ha of habitat of Ramsar-Crocodile Lake has been improved every year.	Ongoing as planned	Annual activity. However, only 2,5 ha/year is being achieved due to limited budget,
E.5	Improve grassland for ungulate in Nui Tuong	50ha of grassland for ungulate in Nui Tuong has been improved every year	Ongoing as planned	50 ha/5 years and 20 set up artificial mineral pits and 2 water holes 40m ² /hole

<i>Output 7: Develop a model of planting Golden Camellia (Camellia spp.)</i>				
G.3	Develop and maintain plantation a model for the first 5 years	A 5-ha model of planting Golden Camellia in Nui Tuong with plantation of 1.200 trees (240 trees per ha) has been developed in 2021 and maintained from 2022 to 2025.	Ongoing as planned	1.200 trees (240 trees/ha*5ha) the planting under the Camellia high tree canopy
G.4	Conduct fire prevention and anti-pests and diseases in the first 4 years	Fire prevention and anti-pests and diseases have been conducted in the plantation model of Golden Camellia for 4 years from 2021 to 2025.	Ongoing as planned	Built a storehouse for containing the tools and materials. Activities like prevention of forest fires in the dry season, watering, and making fire bands, assigning a person in duty 24/7 for watering and preventing fire and regular control pests and diseases are to be implemented annually until the end of the project.
<i>Output 8: Collect orchids (Orchidaceae) and set up a greenhouse for orchid genus resource conservation at CTNP.</i>				
H.3	Design and build a system of orchid greenhouses and the grid house	A system of orchid greenhouse and grid house has been designed and built by Quarter 4 of 2022.		Re-designed and bidding. It will be built from August, 2023
H.4	Purchase equipment and supplies for the greenhouse system	A set of equipment and supplies for the greenhouse system has be purchased in 2022 and 2023.	Delayed/Pending	Pending
H.5	Maintain greenhouse system	The greenhouse system has been maintained for 4 years from 2022 to 2025.	Delayed/Pending	Pending
<i>Output 9: Develop supporting documents, materials and tools to improve conservation capacity.</i>				
I.1	Prepare a plan supporting documents, materials and tools (patrolling, wildlife monitoring, educating communities in forest protection, handling violators and handbooks for rangers and communities) to improve conservation capacity	A plan for supporting documents, materials and tools (patrolling, wildlife monitoring, educating communities in forest protection, handling violators and handbooks for rangers and communities) to improve conservation capacity has been prepared by Quarter 1 of 2022.	Ongoing as planned	Planning of developing 3 materials 1. Handbook of Biodiversity Interpretation of Cat Tien National Park 2. Handbook of climate change awareness and adaptation for CTNP and buffer zone 3. Web application to support the management of biodiversity database in CTNP

I.2	Contract experts	Two experts have been contracted by Quarter 1 of 2022 to prepare supporting documents, materials and tools to improve conservation capacity.	Ongoing as planned	1. Handbook of Biodiversity Interpretation of CTNP 2. Web application to support the management of biodiversity database in CTNP for CTNP area and buffer zone
I.3	Compile documents and materials	A set of supporting documents, materials and tools has been compiled by Quarter 4 of 2022.	Ongoing as planned	On-going
I.4	Organize workshop on reviewing documents	A workshop on reviewing supporting documents, materials and tools has been organized in Quarter 1 of 2023.	Ongoing as planned	On-going
I.5	Submit supporting documents and materials to competent authority for censoring and licensing	By Quarter 4 of 2022, supporting documents and materials have been censored and licensed by competent authority before being printed and circulated.	Ongoing as planned	On-going
I.6	Design, print, publish, circulate supporting documents and materials	One set of documents with fifty (50) copies of supporting documents and materials have been designed, printed, published and circulated by Quarter 1 and 2 of 2024.	Ongoing as planned	On-going
<i>Output 10: Organize training on forest protection skills associated with biodiversity monitoring, focusing on waterbirds, Phasianidae, Hornbills, large mammals, and small carnivores. Monitor some rare species by remote sensing technology by consultants, and monitor key species by CTNP</i>				
J.4	Monitor key species	At least 5 key species, focusing on waterbirds, Phasianidae, Hornbills, large mammals, and small carnivores, have been monitored yearly using remote sensing technology and annual monitoring reports have been produced accordingly.	Ongoing as planned	The activity will be implemented annually A total of 7 species were monitored. Completed the activity of wildlife monitoring in Q2-2023 and one more wildlife monitoring in November 2023.
<i>Output 12: Develop coordination regulations on forest protection with local authorities, sign commitments on forest protection with households (without community forest protection committee establishment)</i>				
L.4	Implement and evaluate coordination regulations, commitments of HH	Coordination regulations and commitments of households have been implemented and evaluated every year. By 2025, a final evaluation report has been produced.	Ongoing as planned	The activity will be implemented annually. Monitoring of 8 districts,
Objective 3: To conduct piloting of models for sustainable livelihood improvement of communities in the buffer zone				
<i>Output 16: Support the planting, maintenance and marketing of high-value tree crops (cashew-nut, durian, avocado) to help improve the livelihoods of ethnic minorities in Village 3 and Village 4 of Phuoc Cat 2 commune</i>				

P.3	Support marketing of high-value agricultural products through supply demand conferences, fairs, exhibitions, and consideration of consumption patterns of agricultural products in the provinces.	By Quarter 1 of 2025, marketing of high-value agricultural products has been supported through supply demand conferences, fairs, exhibitions in 3 sites of the district and 5 sites of Da Lat city, Lam Dong province and through website.	Delayed/Pending	Pending
<i>Output 18: Develop and promote homestay model in Nam Cat Tien commune, Tan Phu district, Dong Nai province in accordance with local customs and practices as a tourism-based alternative livelihood</i>				
R.4	Support the homestay model suitable to the customs of the local people	Six homestay models suitable to the customs of local people has been supported 02 models in 2022; 02 models in 2023 and 02 models in 2024	Ongoing as planned	Drafted planning
R.5	Cooperate and associate with CTNP, domestic and foreign enterprises Tour Operators	From 2022 to 2025, CTNP has cooperated and signed 10 contracts with 5 households and 2 tour operators. (3 contracts in 2022; 3 contracts in 2023; 2 contracts in 2024 and 2 contracts in 2025)	Ongoing as planned	Drafted planning
R.6	Replicate the model to other potential communes	From 2024 to 2025, the homestay model has been replicated to Ta Lai commune.	Delayed/Pending	Pending

Annex IV: Result on Questionnaire Survey for Project Staff

According to the data summarized in Figure 7, the evaluation team evaluated the project based on six criteria: relevance, effectiveness, efficiency, impact, sustainability, and coherence. On average, the project received a score of **4.2 out of 5.0**, showcasing that the majority of participants view the project as having "**very good performance**," which indicates that the level of satisfaction of the project staff is "**very high**."

The project staff evaluated the initiative based on several criteria and believes that it aligns well with national strategic priorities and current national and provincial policies, programs, and plans. They maintain that the project's objectives and actions continue to be pertinent in the realms of park management, personnel capacity building, policymaker guidance, and fostering community involvement in forest conservation. Here is a breakdown of the feedback based on different criteria:

Relevance: The staff gave a high score of 4.3 out of 5.0, highlighting that the project aligns with strategic priorities and addresses the existing needs and goals of park management and community engagement.

Effectiveness: Despite scoring slightly lower, with a 3.8 out of 5.0, the project was still regarded as performing well. The slight dip in the score may be attributed to delays and necessary adjustments in some activities during the project implementation phase.

Efficiency: The staff expressed satisfaction with the cost-effectiveness of the project activities, awarding a high score of 4.1 out of 5.0, indicating efficient budget utilization in accomplishing the project goals.

Impact: The project staff awarded a high score of 4.2 out of 5.0 indicating that the project has been quite impactful in achieving the desirable inputs for the conservation needs of CTNP and livelihood enhancement of the local people in the three villages.

Sustainability: The project secured a strong score of 4.2 out of 5.0, showcasing the staff's confidence in the project's potential for sustained impact over time.

Coherence: The project excelled in maintaining coherence, receiving a score of 4.4 out of 5.0. This reflects a well-structured and harmonized approach to aligning the project's goals and activities with existing frameworks and initiatives.

Overall, the staff's feedback underscores the project's alignment with national directives and its substantial fulfillment of set objectives while also hinting at areas where there is room for improvement, especially in terms of executing efficiency.

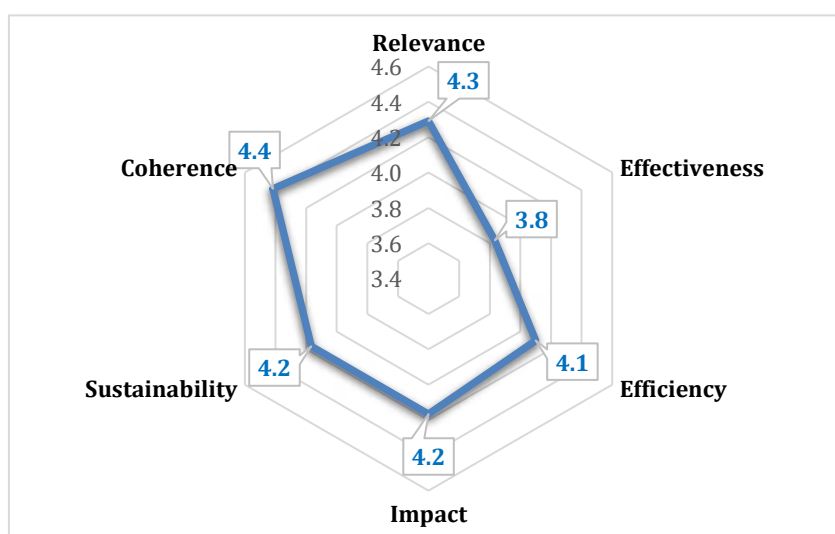


Figure 6 Average score of the project staff for all the six criteria

Table 12 Project staff's perceived scores on evaluation questions and criteria, and average score on overall project performance

Sr.	Question	Score
	Average	4.2
I.	Relevance	4.3
1.	The project outputs comply with Viet Nam's national strategic priorities, and the current national/provincial policy, program, and plan.	4.7
2.	To what extent do you believe that the project objectives, activities, and outcomes are still relevant to the needs of the park management.	4.5
3.	Is the project relevant to improving the capacity of park managers, policymakers, and the engagement of the local community in forest protection and management?	4.7
4.	To what extent do you believe the project had interventions/activities that specifically promote gender equality?	3.3
II.	Effectiveness	3.8
5.	How would you rate the performance of the project in terms of achieving the objectives and outcomes of the project?	3.8
6.	How would you rate the capacity of the park staff with respect to implementing the project activities?	3.8
7.	Do you agree that the project activities improved the capacities of policymakers, park staff, and the local community involved in the project?	3.8
III.	Efficiency	4.1
8.	Please rate the cost-effectiveness in the implementation of the project activities, compared to similar activities funded by the government or other agencies.	4.5
9.	How well do you think the project effectively utilized its available resources (e.g., budget, personnel, equipment)?	4.3
10.	To what extent do you believe the project activities were completed within the planned timeframe?	3.8
12.	Do you think project interventions help in improving the livelihoods of the people living in the village/commune?	3.7
13.	To what extent do you believe the project achieved its objectives and outcomes with the available resources?	4.2
IV.	Impact	4.2
14.	How would you rate the impact of the project activities on the conservation effort of the Cat Tien National Park?	4.7
15.	Please rate the impact of the project activities on the livelihood of the communities living in the three villages.	4.0
16.	How would you rate the likelihood of the impact of the project interventions in influencing policy changes in the future?	3.8
V.	Sustainability	4.2
17.	In your opinion, how likely will the benefits and improvements brought by the project continue in the long term?	4.5
18.	How would you rate the preparedness of the project in terms of ensuring the sustainability of the project interventions in the long term?	3.8
19.	Do you think that the project approach or results could be replicated or scaled up in another village/commune?	4.2
VI.	Coherence	4.4
20.	How well did the project fit into the broader development strategies and efforts in the region or country?	4.7
21.	Please rate the coordination/collaboration level the project had with the relevant stakeholders.	4.2

Table 13 List of respondents

No.	Name	Gender	Position	Affiliation to the Project
1	Nguyen Van Thanh	Male	Deputy Director of Cat Tien National Park	Director of Project Management Unit
2	Pham Huu Khanh	Male	Head of Science and International Cooperation Department	Project Focal Point & Member of PMU
3	Nguyen Duy Khang	Male	Head of Planning -Finance Department	Project Accountant & Member of PMU
4	Nguyen Dinh Quoc Viet	Male	Deputy Director of Center for Environmental Education and Services, Member in charge of Ecotourism Development	Member of PMU
5	Pham Ngoc Duong	Male	Deputy Director of Center for Wildlife Rescue, Conservation and Species	Member of PMU
6	Duong Thanh Trung	Male	Deputy Head of Department of Personnel and Administration	Member of PMU

Annex V: Result on Questionnaire Survey for Park Staff

According to the data summarized in Figure 8 and based on the questionnaire survey results of 19 park staff evaluated based on six criteria: relevance, effectiveness, efficiency, impact, sustainability, and coherence. On average, the project received a score of **4.1 out of 5.0**, showcasing that the majority of participants view the project as having "**very good performance**," which indicates that the level of satisfaction of the park staff is "**very high**."

A total of 19 park staff responded to the questionnaire. Respondents were found to be well representative of the different levels of park staff, including rangers, station heads, staff members, accountant, experts, vice-heads, and heads of departments.

Relevance: The staff rated the project's relevance highly, awarding it a score of 4.1 out of 5.0. This score reflects the staff's belief that the project's objectives and activities, including capacity-building training, are highly pertinent to the needs of both the park and its personnel.

Effectiveness: Receiving a score of 4.3 out of 5.0, the project was seen as very effective in achieving its desired outputs and outcomes. Staff noted that workshops and training facilitated by the project notably enhanced the staff's capabilities. They emphasized a strong recommendation for their peers to take part in such educational endeavors.

Efficiency: The project received a score of 3.8 out of 5.0 in terms of efficiency. While the score indicates good performance, staff suggested that there is potential to optimize the use of resources further, pinpointing a space for growth through an efficient resource allocation and realistic costing against each activity.

Impact: Rated at 4 out of 5.0, the staff acknowledged the project's substantial positive influence on the conservation endeavors undertaken at the Cat Tien National Park. They recognized the role of project activities in not just fostering better conservation practices but also in uplifting local communities and enhancing staff proficiency.

Sustainability: The staff awarded a score of 3.8 out of 5.0 for the project's sustainability. Although this was one of the lowest scores, it still showcases a positive assessment. The staff voiced the need for strategies to maintain the benefits derived from the project, with a particular focus on the prolonged use of training materials even after the project concludes.

Coherence: With a high score of 4.2 out of 5.0, staff appreciated the well-coordinated and integrated approach of the project, aligning seamlessly with similar initiatives and activities, underlining a high level of coherence.

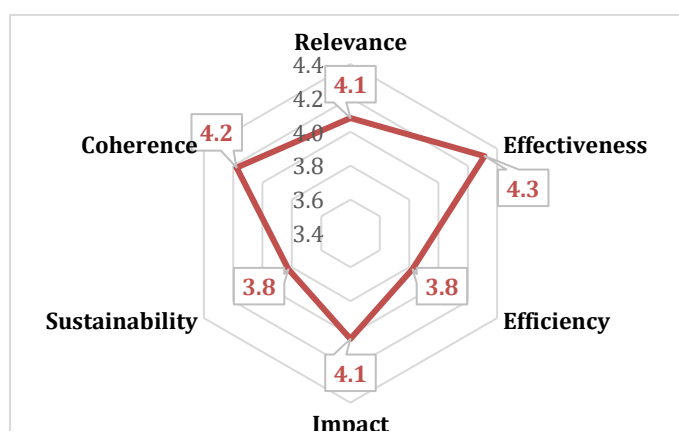


Figure 7 Average score of the CTNP Staff for all the six criteria

Table 14 Park staff's perceived scores on evaluation questions and criteria and average score on overall project performance

Sr.	Question	Score
	Average	4.1
I.	Relevance	4.1
1.	Do you think that the project objectives, activities, and outcomes are relevant to the needs of the park?	4.1
2.	How would you rate the relevancy of the following project activities in enhancing the conservation efforts and building the capacities of the park staff?	
	(a) training on biodiversity conservation	4.0
	(b) study tour to the national park and protected Area	4.1
	(c) training on climate change and social impacts in CTNP	3.9
	(d) training on forest protection skills (biodiversity monitoring: water birds, mammals, small carnivores, etc.)	4.5
	(e) training on forest protection skills (biodiversity monitoring: water birds, mammals, small carnivores, etc.)	3.8
	(f) training on forest protection skills (use of patrol equipment: GPS, Maps, developing forest protection patrolling plan and method, communication education skills, and management of violators in the community)	4.4
3.	How would you rate the level of inclusiveness of relevant stakeholders in the project formulation/implementation.	3.9
II.	Effectiveness	4.3
4.	How do you think the project activities contributed towards achieving the objectives and outcomes?	3.8
5.	How effective were the training and workshops that were organized through the project are in terms of enhancing the capacities of the park staff to achieve the objectives and outcomes of the project?	4.4
6.	Would you recommend your fellow staff to the training and workshops listed above?	4.8
III.	Efficiency	3.8
7.	How well do you think the project utilized its resources (financial, human, technological)?	3.9
8.	To what extent do you believe that the project achieved its outcomes in a cost-effective manner?	3.8
9.	How adequately were the resources allotted to successfully implement the project activities?	3.8
IV.	Impact	4.1
10.	How would you rate your capacity on a forest protection plan and method, and management of violators?	4.0
11.	How would you rate the impact of the project activities on the conservation efforts of Cat Tien National Park?	3.8
12.	How would you rate the impact of the project activities enhancing the capacities and livelihood of the local communities?	4.2
13.	Please give a score on how the level of impact that training and workshops organized through the project had on building your capacity.	4.3
V.	Sustainability	3.8
14.	How would you rate the overall sustainability of the project impact in the future?	3.6
15.	Would you share knowledge, skills, and experiences acquired from training and workshops to your colleagues/other staff?	4.3
16.	Do you think that the project intervention will be sustainable in the future?	3.7
17.	How likely will the park utilize the training materials developed through this project after the completion of the project?	3.6
VI.	Coherence	4.2
18.	How well do you think the project's activities and outputs were coordinated and integrated with similar projects or activates.	4.2

Table 15 List of respondents

1	Dao Thi Huong
2	Nguyen Xuan Tien
3	Tran Van Binh
4	Nguyen Duy Khang
5	Nguyen Thi Ngoc Thin
8	Tran Van Nhat
9	Nguyen Phu Curong
10	Nguyen Thanh Long
11	Nong Van Thanh
12	Nguyen Thi Nguyet
13	Le Viet Ho
14	Huynh Van Trung
15	Luong Thanh Hung
16	Dinh Tien Hau
17	Vu Thi Tu Hai
18	Nguyen Van Tuan
19	Nguyen Van Binh

Annex VI Result on Questionnaire Survey for Villagers

According to the data summarized in Figure 9 and Table 13, villagers evaluated the project based on four criteria: relevance, effectiveness, impact, and sustainability. On average, the project received a score of **4.0 out of 5.0**, showcasing that the majority of participants view the project as having "**good performance**," which indicates their satisfaction as "**high**." The efficiency and coherence criteria were not included for evaluating the projects for the villagers with the assumption that the villagers might not have adequate information on project funds, expenditures and similar projects or activities.

Relevance: The local villagers rated the relevance of the project activities favorably, awarding a score of 3.5 out of 5.0. These activities, which catered directly to the villagers' needs, encompassed training in cultivation techniques, forest protection, biodiversity, and community-based tourism (CBT), collaboration on forest protection efforts, distribution of high-value trees, and the development of grazing pastures.

Effectiveness: The effectiveness of the project activities was viewed even more positively, securing a score of 4.4 out of 5.0.

Impact: The impact of the project also received a substantial rating, with a score of 3.8 out of 5.0, indicating good performance. When villagers were asked open-ended questions about the primary benefits they derived from the project, responses highlighted job creation and enhancements to household livelihoods. They noted improvements in their abilities related to tourism and cultivation techniques, as well as better management of grazing pastures and the provision of various plant varieties.

Sustainability: The project was highly commended on sustainability, achieving a score of 4.3 out of 5.0. This positive feedback likely stems from the villagers' appreciation for the ongoing collaboration on forest protection with the Cat Tien National Park and their optimistic outlook on the survival and future profitability of the newly planted seedlings. To further enhance the project's sustainability, villagers suggested for additional training courses to build capacities in ecotourism, environmental stewardship, and cultivation techniques. They also recommended the supply of fertilizers and water sprinkler systems and forging market linkages for local products to foster better conservation of forest resources and biodiversity and to uplift the local populace's way of life.

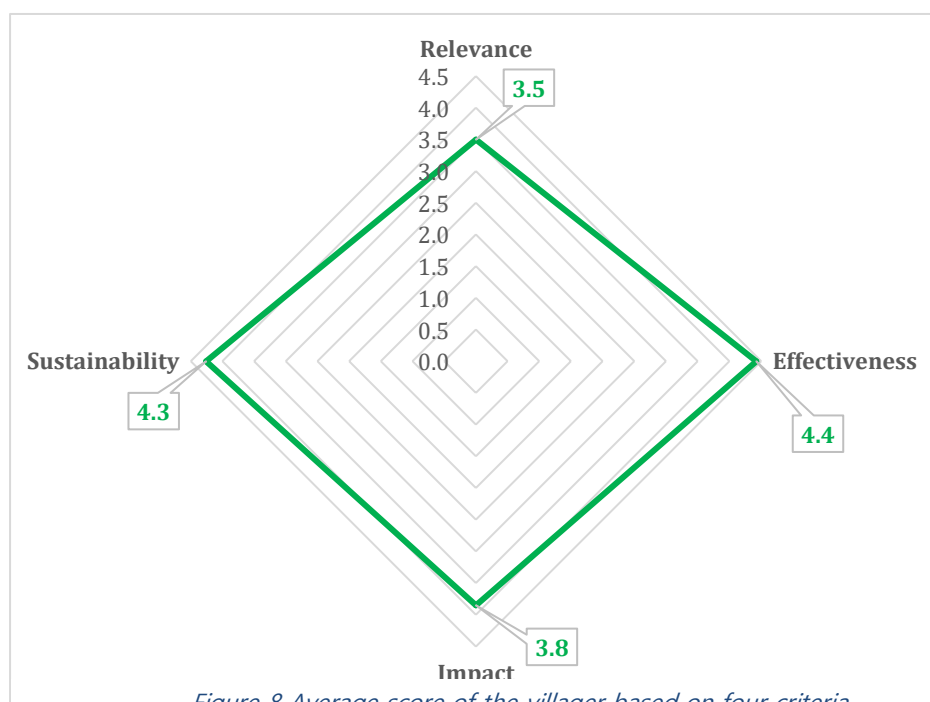


Figure 8 Average score of the villager based on four criteria

Table 16 Villagers' perceived scores on evaluation questions and criteria, and average score on overall project performance

Sr.	Questionnaires	Score
	Average	4
I.	Relevance	3.5
1.	How would you rate the relevancy of the following project activities to the needs/ priorities of your village.	
	(a) training on climate change and social impacts for people	3.3
	(b) training courses on capacity building (cultivation methods and practices, etc.) for local communities to adapt to climate change and social impacts	3.8
	(c) training on forest protection skills	4.7
	(d) signing commitment and cooperation for forest protection	4.8
	(e) planting and sustainable production of high-value tree (Cashew nut, Avocado, durian etc.)	4.4
	(f) establishment of intensive grazing pastures management for ethnic minority	3.1
	(g) training courses on CBT knowledge and skills for HHs and local guiders	3.9
	(h) study tour to national parks	3.0
2.	How relevant are the above activities for the conservation and development of forest resources in your area?	4.1
3.	How well did the project address the specific needs and priorities of your village?	4.1
II.	Effectiveness	4.4
4.	How would you rate the effectiveness of the project activities in terms of bringing positive changes in your village.	4.3
5.	Do you think you have acquired useful information, knowledge, and skills from the training and capacity-building program organized by this project?	4.4
6.	Would you recommend other villagers/community members to participate in activities (training, workshop, study tour, forest protection)?	4.6
III.	Impact	3.8
7.	Please rate the impact level of the project activities towards building communities capacities in your village.	3.9
8.	How would you rate the impact of the project interventions (capacity building, planting high-value trees, engagement in forest protection, establishment and management of grazing pasture, etc.) towards improving the livelihoods of the communities in your village?	3.8
9.	Do you think project intervention will contribute to biodiversity and forest resource protection and development in your area?	4.2
IV.	Sustainability	4.3
10.	Please provide a score on the likelihood of your continuous participation in this project considering the project interventions.	4.1
11.	Do you think you will keep cooperation/engagement for forest protection in the future?	4.8
12.	How would you rate the survival and productivity of high-value trees you planted through this project in the future?	4.7
13.	Please provide a score on the sustainability of grazing pasture and management introduced by this project.	3.5

Table 17 List of respondents

1	Ka Thi Ngoc Huong	33	Dieu K-Doi
2	Hua Van Mai	34	Dieu K Mai
3	Nguyen Van Huan	35	Dieu K Lot
4	Hoang Thi Thoi	36	Dieu K Bay(A)
5	Nong Thi Lun	37	Dieu Thi Hai
6	Nong Giang Nam	38	Dieu Thi Nhon
7	Ly Van Khanh	39	Dieu thi UT
8	Ly Van Tao	40	Dieu Thi Men
9	Trieu Van Tich	41	Dieu Thi Bron
10	Nong Dinh Tu	42	Dieu Thi Map
11	Nguyen Thi Tan	43	Dieu Thi Don
12	Trieu Thi Viet	44	Dieu Thi Ngoan
13	Hua Thi Loan	45	Bui Thi Hong
14	Dieu Thi Oi	46	Nong Thi San
15	Dieu Thi Diem	47	Nong Thi Dung
16	K Re	48	Trieu Thi Viet
17	Dui Thi Dung	49	Hua Thi Tam
18	Dieu K Bun	50	Dang Thi Xuan
19	Dieu K Bun	51	Nguyen Thi Thom
20	Dieu K Lanh	52	Hua Thi Kim
21	Dieu K M Do	53	Nguyen Thi Du
22	Dieu K Bang	54	Nguyen Xuan Ran
23	Dieu K Lang	55	Trieu Van Ky
24	Dieu Ty	56	Nguyen Van Huan
25	Dieu K Ding	57	Nong Trong Nam
26	Dieu Thi Tuyet Dyn	58	Hua Van Thi
27	Dieu Thi Lan	59	Luc Van Nguyen
28	Dieu Thi Xa	60	Nong Van Thi
29	Dieu Thi Ble	61	Hua Thuy Lan
30	Dieu K Do	62	Hua Van Mai
31	Dieu K Nam	63	Nong Van Tu
32	Dieu K Nang		

Annex VII: List of participants from the three villages for focus group interview

Participants from Village 4				
SN	Name	Age	Sex	Benefits from the Project
1	Dieu Ty	28	M	63 seedlings of Durian fruit trees
2	Dieu K Bron	37	M	42 seedlings of Avocado trees
3	Dieu K Bon	33	M	42 seedlings of Durian fruit trees
4	Dieu K Bam	54	F	105 seedlings of Durian fruit trees
5	Dieu K Hoai	60	M	63 seedlings of Durian fruit trees
Participants from Village 3				
SN	Name	Age	Sex	Benefits from the Project
1	Dieu K Nang	41	M	126 seedlings of Durian fruit trees
2	Dieu K Minh	52	M	63 seedlings of Durian fruit trees
3	Dieu Thi Hai	26	F	42 seedlings of Durian fruit trees
4	Dieu Thi Chin	43	F	105 seedlings of Durian fruit trees
5	Dieu K Dot	48	M	42 seedlings of Durian fruit trees
Participants from Village 7				
SN	Name	Age	Sex	Benefits from the Project
1	Hoang Trung Kien	44	M	Grazing pasture in 0.2 Ha land
2	Nong Thi Luyen	41	F	Grazing pasture in 0.1 Ha land
3	Nong Thi Hoi	67	F	Grazing pasture in 0.1 Ha land
4	Nong Van Huong	37	M	Grazing pasture in 0.4 Ha land
5	Ly Van Tao	45	M	Grazing pasture in 0.5 Ha land
6	Nong Van Thanh	33	M	Grazing pasture in 0.1 Ha land
7	Ly Van Hung	30	M	Grazing pasture in 0.15 Ha land

Annex VIII: List of participants from the PSC & PMU for the focus group interview

No.	Name	Gender	Position	Affiliation to the Project
1	Luu Tien Dat (Ph.D)	Male	National Focal Point for Viet Nam	Senior Officer of Department of Forestry
2	Pham Xuan Thinh	Male	Director of Cat Tien National Park	Deputy Head of PSC
3	Nguyen Van Thanh	Male	Deputy Director of Cat Tien National Park	Director of Project Management Unit
4	Pham Huu Khanh	Male	Head of Science and International Cooperation Department	Project Focal Point & Member of PMU
5	Nguyen Duy Khang	Male	Head of Planning -Finance Department	Project Accountant & Member of PMU
6	Nguyen Dinh Quoc Viet	Male	Deputy Director of Center for Environmental Education and Services, Member in charge of Ecotourism Development	Member of PMU
7	Nguyen Thanh Long	Male	Deputy Head of Forest Protection Department	Member of PMU
8	Pham Ngoc Duong	Male	Deputy Director of Center for Wildlife Rescue, Conservation and Species	Member of PMU
9	Duong Thanh Trung	Male	Deputy Head of Department of Personnel and Administration	Member of PMU

Annex IX: List of participants from the CTNP Staff for the focus group interview

No.	Name	Gender	Age	Affiliation	Working years in Cat Tien
1	Nguyen Van Binh	Male	45	Hat Kiem Lam (Park Ranger)	22
2	Nguyen Tu Phiet	Male	42	Van Phong Vuon (Park office)	17
3	Vu Van Ngoc	Male	32	Hat Kiem Lam (Park Ranger)	4
4	Bui Van Truong	Male	25	Hat Kiem Lam (Park Ranger)	3
5	Ngo Van Binh	Male	36	Trung Tam Cuu Ho (Rescue Center)	14
6	Nguyen Van Khanh	Male	30	Trung Tam Cuu Ho (Rescue Center)	3
7	Tran Dinh Hung	Male	47	Hat Kiem Lam (Park Ranger)	20
8	Dinh Tien Hau	Male	32	Hat Kiem Lam (Park Ranger)	10
9	Nguyen Van Sang	Male	38	Hat Kiem Lam (Park Ranger)	13
10	Pham Ngoc Tuan	Male	45	Hat Kiem Lam (Park Ranger)	12
11	Bui Xuan Manh	Male	34	Hat Kiem Lam (Park Ranger)	12
12	Huynh Van Trung	Male	58	Hat Kiem Lam (Park Ranger)	37
13	Bui Dinh Mai	Male	46	Hat Kiem Lam (Park Ranger)	24
14	Nguyen Van Tuan	Male	32	Hat Kiem Lam (Park Ranger)	10
15	Tran Van Nhat	Male	39	Park office	13