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Terminal evaluation
of the project
“Climate Adaptation
in Wetlands Areas
in the Lao People’s
Democratic Republic”



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**Terminal evaluation of the project
“Climate Adaptation in Wetlands Areas
in the Lao People's Democratic
Republic”**

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Abstract

The terminal evaluation of the project "Climate Adaptation in Wetlands Areas in the Lao People's Democratic Republic" was undertaken to provide an assessment of the project performance and progress of implementation for planned project activities and outputs against actual results. The terminal evaluation was conducted in-country with interviews and field trip over May 2022, and a home-based analysis and reporting phase from June. The report tables recommendations for improving the project implementation and lessons learned that may help in the design and implementation of future Food and Agriculture Organization of the United Nations (FAO) and Global Environment Facility (GEF) initiatives in the field of sustainable management of wetlands.

The overall rating of the project performance and achievement of outcomes was Satisfactory.

The project has achieved most of the targets (a few final activities to be completed at evaluation end). The initial design was for 24 villages but this was expanded to 89 villages including several other important wetlands-dependent villages. Whilst this increase coverage, the intensity of activities were more thinly spread. The project was able to achieve the five main outcomes: i) increased the wetland function (and fish population); ii) reduced human pressure on the wetlands; iii) reduced climate change and disaster risks; iv) increased amount of water stored in landscape for food security and ecosystem use; and v) increased the amount of water storage in the landscape for dry and wet season livelihood enhancement activities. The status of target wetlands have already improved and productivity (fish diversity and populations) has increased. The project activities have also created a secure environment for the wetlands, fisheries and biodiversity within them with development of locally gazetted and demarcated wetland and fish conservation reserves, management plans and arrangement of stewardship of communities. To support scientific planning of wetland, it has mapped all wetland areas and also generated information on fish species diversity and stocks, biodiversity/density, water resources, flood patterns and socio-economic situation of surrounding households. The project trained local community in wetland management, established wetland and fish conservation reserves, developed management plans, trained and implemented various livelihood activities, developed village level veterinary centers and volunteers networks, village management committees (for investments, fisheries, water use and wetland reserves), and also created revolving funds for continuation of activities beyond the project life.

Relevance was rated Satisfactory, with design, activities and approaches relevant to the two target wetlands, and in line with FAO, GEF and government priorities. Effectiveness was Satisfactory due to achievements noted above. Efficiency was Moderately Satisfactory with slow procurement and contracting processes of FAO causing delays over 2020-2021. Sustainability is judged to be Moderately Likely. There have been successful investments in promotion of evidence-based planning and mainstreaming of climate change adaptation (CCA), disaster risk management (DRM) and wetland conservation in the regular national to district planning exercises, training of government staff and participating communities. Ramsar site steering committees have been established. A major threat continues to be encroachment of wetland for rice cultivation and use of chemical fertilizer and pesticides in rice fields.

Recommendations included: successful completion of remaining activities; conducting demarcation and formation of management committees in the wetlands not yet demarcated, and establish fishery conservation zone (FCZ) in potential wetlands. With very large uncovered areas to consider, it is recommended to develop another mega project in future. For future initiatives, further diversification of income and alternative livelihood programs for poor households in recommended.

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The views expressed in this report are intended to offer an overview of the lessons learned from this project. We have tried to balance our thoughts and offer fair perspectives on learnings from both people and reports.

Finally, with great admiration, we are very happy to have experienced the dedication and enthusiasm that so many people bring to their work in managing wetlands and adaptation activities. We would like to thank them and wish them every success in their continuing endeavours.

Abbreviations

CAWA	Climate Adaptation in Wetlands Areas
CCA	climate change adaptation
DRM	disaster risk management
ESS	environmental and social safeguards
FAO	Food and Agriculture Organization of the United Nations
FCZ	fishery conservation zone
GEF	Global Environment Facility
IUCN	International Union for Conservation of Nature
KAP	knowledge, attitude and practice
LOA	letter of agreement
LWU	Lao Women's Union
M&E	monitoring and evaluation
NGO	non-governmental organization
NRM	natural resources management
NTFP	non-timber forest product
PIR	Programme Implementation Report
PMU	Project Management Unit
PPR	project progress report
TOC	theory of change

Executive summary

1. The terminal evaluation of "Climate Adaptation in Wetlands Areas in the Lao People's Democratic Republic" was undertaken to provide an assessment on the performance and implementation progress of planned project activities and outputs against actual results. The review also examined the extent and magnitude of the project's outcomes from 1 June 2016 to 30 April 2022 and determined the likelihood of future impacts of the intervention. The terminal evaluation was conducted as an in-country phase (interviews and field visits) in May 2022 and a home-based analysis and reporting phase from June to October 2022. There may have been further progress during the finalization of this report, specifically the project's extension period from July to December 2022. Where appropriate, such progress is highlighted through updates from the project team. Please note, however, that the terminal Evaluation Team could not verify these details. The report provides recommendations and lessons learned to support the design and implementation of future initiatives on the sustainable management of wetlands. This addresses efforts by the Food and Agriculture Organization and the United Nations (FAO) and the Global Environment Facility (GEF). Globally, this aims to improve biodiversity conservation, natural resources production and fisheries production so that rural food security and livelihoods can be supported in adapting to climate change and mitigating natural disasters.
2. The terminal evaluation assessed and provided ratings on: i) relevance; ii) achievement of the project results (effectiveness), including the project's capacity development dimensions and likely progress towards impact; iii) efficiency; iv) sustainability; v) factors affecting performance, including project design and readiness, implementation, execution, financial management, co-financing, stakeholder engagement, knowledge management, and communications, and monitoring and evaluation (M&E); and vi) cross-cutting issues like gender, Indigenous Peoples, human rights, environmental and social safeguards (ESS) and mitigation provisions.

Main findings of the terminal evaluation

Overall rating of project performance and achievement of outcomes: Satisfactory

3. The project achieved most targets on reducing climate change vulnerability and natural disaster risk for communities and the threatened wetland ecosystems upon which they depend. A few, final activities had just started and a few were ready to begin at the time of this evaluation as per the work plan and results framework. The project accomplished more work outputs in the extended period through December 2022. Regardless, the monsoon season may have impeded some activities. The project was designed for 24 villages. In 2019, this became 89 with several other important wetlands and wetland-dependent villages. This was due to the hydrological and biological process of the wetlands. The broader project scope included more beneficiary households for the livelihood, food security and natural resources management (NRM) programmes. As a result, the project could not carry out the same level of activities in all villages due to time and staffing limitations and implementation feasibility. The project was able to achieve five main outcomes: i) increased wetland functions (and fish population); ii) reduced human pressure on the wetlands; iii) reduced climate change and disaster risks (flood and drought avoidance); iv) increased amount of water stored in the landscape for food security and ecosystem use (including drinking water); and v) increased amount of water storage in the landscape for livelihood enhancement activities during the dry and wet seasons. The status

of the target wetlands has already improved, and productivity (fish diversity and population) has increased. This has improved the household economy and, to some extent, food security. The strengthened resilience of households can adapt to climate change and mitigate disaster risks. Further, the project activities created a secure environment for the wetlands, the fisheries and the biodiversity within them through the development of local gazette and demarcated wetland and fish conservation reserves, management plans and stewardship arrangements in all communities. All wetland areas were mapped to support scientific wetland planning. The project also generated information on: fish species diversity and stocks; biodiversity and density; water resources; flood patterns; and the socioeconomic situation of the surrounding households. The project also achieved the following: trained the local community in wetland management; established wetland and fish conservation reserves; developed management plans; trained and implemented various livelihood activities; and developed village-level veterinary centres, volunteer networks and management committees (for investments, fisheries, water use and wetland reserves). It also created revolving funds to continue activities beyond the project's lifespan. The project conducted various awareness programmes, renovated cultural monuments and assisted in developing infrastructures and management systems for the promotion of community-based ecotourism. The project also organized wetland clearing, invasive weed control, tree planting events and a wetland and riparian reforestation programme implemented by local populations, including women and school children. The project developed a Gender Strategic Plan and involved the Lao Women's Union (LWU) to train and supervise government officials at the provincial and district level. It also engaged with communities on gender mainstreaming, gender violence, gender-related laws and the improvement of women's livelihoods through the development of local handicrafts and food processing. The project's M&E system was prepared and implemented but affected by numerous design problems, focus shifts and COVID-19. A communications plan was developed. All of these activities created an environment to achieve the project's objectives: strengthen climate change adaptation (CCA), disaster risk management (DRM) and NRM in both the wetland areas and the communities.

Relevance: Satisfactory

4. There are several barriers in the Lao People's Democratic Republic when it comes to climate change vulnerability among livelihoods in the wetlands. To address them, the project had various capacity enhancement activities. Better infrastructure and cost-effective adaptation measures aimed to reduce the impact of climate change and natural disasters on local food security and livelihoods, and to reduce local pressures on wetland ecosystems. The project activities and approach were relevant to the two target wetlands. It could contribute to the long-term sustainability of CCA, DRM and NRM within the wetlands. The activities were relevant to produce the intended outputs and achieve the project's objective. Even the project's relevance, which had been identified during project design, did not change. Similarly, local stakeholders also agree that the project is relevant in addressing their climate change issues. The project's overall objectives and interventions were in line with the 2016–2021 FAO Country Programming Framework for the Lao People's Democratic Republic, specifically: Outcome 1, fostering agricultural production and rural development; Outcome 2, improved food security and nutrition, with special focus on the most vulnerable (for example, poor women, food-insecure farm households); and Outcome 4: improving capacity [of the government and communities] to respond to food and agricultural threats and emergencies and the impact of climate change. It contributes to FAO's Strategic Framework: Strategic Objective 1, help eliminate hunger, food insecurity and malnutrition;

Strategic Objective 2, make agriculture, forestry and fisheries more productive and more sustainable; Strategic Objective 3, reduce rural poverty; and Strategic Objective 5, increase the resilience of livelihoods to threats and crises, and Outcome 5.3: countries reduced risks and vulnerability at household and community level. The project also aligns with four of the GEF climate change outcomes: Component 1 with Objective CCA-2 Outcome 2.1, increased knowledge and understanding of climate vulnerability and change-induced risks at country level and in targeted vulnerable areas; Component 2 with Objective CCA-1 Outcome 1.2, reduce vulnerability in development sectors, and Outcome 1.3, diversified and strengthened livelihoods and sources of income for vulnerable people in targeted areas; and Component 3 with Objective CCA-1 Outcome 1.1, mainstreamed adaptation in broader development frameworks at country level and in targeted vulnerable areas (GEF, 2011). The project is also in line with the Seventh Five-year National Socio-economic Development Plan (2011–2015) (Ministry of Planning and Investment, 2011), the National Forestry Strategy to the Year 2020 (The Lao People’s Democratic Republic, 2005) and the National Biodiversity Strategy to 2020 and Action Plan to 2010 (The Lao People’s Democratic Republic, 2004). The project also supports the Government of the Lao People’s Democratic Republic in its commitment to various international forums.

Achievement of project results: Satisfactory

5. The targets in the results framework were moderately achieved as per data from May 2022. Delays, mostly due to the COVID-19 pandemic, postponed the final results of the project until December 2022. Some final activities were left to be completed at the time of the evaluation. The project was expected to contribute to its objectives of reducing climate change vulnerability of communities and local development pressures on the threatened wetland ecosystems upon which they depend. This can be done through a better understanding of climate change impacts and risks, including efficient and cost-effective adaptation measures that lessen the impact of climate change and natural disasters on wetland ecosystems and local livelihoods. Mainstreaming these adaptation measures in national, provincial and district planning processes makes the intervention results sustainable. Besides COVID-19 in 2021, project activities were affected by: major flooding in 2019 and 2020; procurement delays; difficulties in adjusting to FAO’s procurement procedures for the supply of local materials; a change in government structure; and government and CAWA staff turnover. The project was on track to achieve its objectives. However, some activities lagged behind the target during the evaluation process from May to July 2022. In fact, some of them may not progress due to the monsoon season. This makes them difficult to complete by December 2022 (see Appendix 4).

Effectiveness (progress towards results): Satisfactory

6. The project results are coherent with the outcomes and objectives of the project. The project achievements are on track to contribute to various CCA targets. The accomplished activities have already started showing initial signs of long-term change. The improvement of dykes has helped to store more water for the dry season, and the development of a water use agreement has helped to manage water efficiently. Thirteen thousand eight hundred twenty-nine households benefited from improved fish consumption and sales from wetlands around the 48 project-established or project-managed fishery conservation zones (FCZs) in Xe Champhone and Beung Kiat Ngong. One thousand two hundred eighty households with 8 400 household members applied different adaptive livelihood activities. The project trained 170 people, including government staff and village heads on CCA planning. Two thousand ninety-six households within or surrounding the wetlands are

involved in and benefiting from one or more adaptive on-farm or within wetlands livelihood practices, and 1 651 households within or surrounding the wetlands are involved in and benefiting from at least one non-agricultural off-farm livelihood support option. At least 3 309 men and women were trained by the project to apply climate change-resilient wetland management, agricultural practices and non-agricultural livelihood support options, and a total of 2 129 ha of natural habitats and nesting sites (fish, crocodile and birds) were protected – including critical wetlands (FAO, 2022). As mentioned by the community groups, the fish population has also increased in community and farmer ponds, raising their income. Farmers mentioned that their income has increased from chicken rearing, fish and chicken hatchery, organic vegetables and growing fodder. The demarcation of wetland and fish reserves and the increased capacity of communities on wetland and fishery management has improved. For aquatic biodiversity conservation, 591 ha of wetland areas are strictly protected as 48 separate FCZs across four districts. The project established well-functioning village-level committees to manage wetland reserves, water, fisheries and veterinary centres, and various other livelihood activities.

Efficiency: Moderately Satisfactory

7. The executing agency's capacity was enhanced by the project. FAO's slow procurement and contracting processes affected project implementation and caused delays between 2020 and 2021. Mobility restrictions due to COVID-19 also added difficulties to project implementation and the procurement process in 2021. Similarly, one approved channel and implementation system through the Ministry of Natural Resources and Environment delayed programme and budget approval. This also delayed budget disbursement to the provinces and districts for the implementation of activities from 2016 to 2018. Some activities were not completed. In fact, few activities that had been cited as complete in the 2021 Programme Implementation Report (PIR) were still not done in the field by the time of the terminal evaluation (see Appendix 4). Also, a baseline, which was to be established in the first year, was not done. Project implementation was very slow in the initial years from 2016 to 2018, and most of the field-level activities were implemented from mid-2019 onwards. Only activities like conducting studies on various subjects through national and international non-governmental organization (NGO) service providers, signed directly with FAO CAWA, had been conducted before 2019. By learning from delays in the initial years, the project changed its implementation approach and signed a letter of agreement (LOA) directly with the provincial and district government agencies. This helped to avoid a long approval process through the Ministry of Natural Resources and Environment. The project also formed community groups in the villages, which is where project activities were implemented. This approach helped to complete a large number of activities within a short time, even during COVID-19. The project established synergies with other projects in the wetlands sector. This includes the International Union for Conservation of Nature (IUCN), the Wildlife Conservation Society and the KfW Development Bank. The project spent USD 94.4 percent of the total GEF grant by 30 May 2022. About 80 percent of the work was accomplished.

Sustainability: Moderately Likely

8. The project trained staff from the Ministry of Natural Resources and Environment and the Ministry of Agriculture and Forestry and its provincial and district offices to promote evidence-based planning and mainstreaming of CCA, DRM and wetland conservation in the regular national to district planning exercises. The project also conducted participatory

planning and implementation actions with community members on various activities to enhance their capacities by focusing on a learning-by-doing approach. Veterinary training will help to provide such services beyond the project's lifespan. Similarly, villagers were trained to be trainers in order to continue activities in the future. The project also prepared management plans for the wetlands and established villager committees to carry out activities beyond the project's lifespan. To do so, the project established revolving funds. The project also contributed to establishing Ramsar site steering committees at the national and provincial level and supported them in holding meetings. These committees will continue to monitor and review of status of Ramsar sites. The Government of the Lao People's Democratic Republic and some sections of the local community were found to be more focused on economic development and tended to be more interested in promoting rice cultivation over wetland, fishery and natural resources conservation. This exasperated the threat of encroachment on the wetlands for rice cultivation, as well as chemical fertilizer and pesticide use in rice fields that could affect wetland biodiversity and local community health. Although the provincial and district governments indicated their willingness to continue supporting the project results, their budget and limited technical manpower may limit them.

Factors affecting performance: Moderately Satisfactory

9. In general, the project design, following additional livelihood activities in 2019, could deliver the expected outcomes. The project also included additional villages (from 24 to 89) to improve coverage of the total contiguous wetland areas under target areas. This aimed to safeguard biological and hydrological cycles of the broader wetland landscapes and the Ramsar sites contained within them. The theory of change (TOC) has information on drivers and immediate objectives. The project's objectives and components were clear, practical and feasible within the time frame. However, there were some delays in activities due to COVID-19 and FAO's slow procurement and contracting processes. The project involved: communities; fisherfolk; farmers; women's provincial and district government offices of the Ministry of Natural Resources and Environment and the Ministry of Agriculture and Forestry; village committees; service providers; and the LWU.
10. The partner, the Ministry of Natural Resources and Environment, and the executing agency, FAO, discharged their roles and responsibilities (other than procurement) effectively. The potential risks were well identified in the project document and reviewed annually. Project implementation always considered mitigation measures outlined in the project document. There was discontinuity of the project team after the resignation of the Chief Technical Adviser in July 2018 and three staff members from March to April 2018. There were only two staff members in the CAWA project office who had worked the whole period from 2016 to 2022. Regardless, four new staff members were recruited from March to April 2019 for the period from March 2018 to February 2019. However, it took seven months to recruit the Chief Technical Adviser and a few more months to recruit other project staff. This affected project implementation.
11. The Ministry of Natural Resources and Environment, the Ministry of Agriculture and Forestry and the LWU, through their offices in provinces and districts, were fully engaged in the decision-making process, the implementation of project activities and the monitoring of project results. The project engaged with a range of national-, local- and community-level stakeholders. Local communities were involved in the implementation and management of activities to reduce climate change and natural disaster risk (food

security and livelihoods). This related to the strengthening of wetlands, fisheries, NRM and biodiversity conservation.

12. The project developed and implemented a communications plan. It aimed to promote knowledge products and project results, raise awareness at the local level and among relevant institutions, and disseminate project-related information to wider audiences through electronic and print media. The project documented and shared its results and lessons through its PIRs and annual reports, the executing agency's website, the United Nations social media, national television and print media. Greater awareness among community members and their engagement in less risky livelihood options that avoid flood and drought was key. Indeed, this involved wetland management and wetland biodiversity conservation in villages that surround two Ramsar sites and the broader landscapes. This improved the capacity of both the wetlands and the communities to adapt. In fact, the livelihood of these communities largely depend on the wetlands. Likewise, the wetlands and survival of the Ramsar sites depend on sustainable local livelihoods. Sharing lessons with the relevant institutions should help to generate funding. This can replicate the success stories from this project for other areas with similar problems.
13. The M&E system is practical. It was developed as per the standard provisions. FAO CAWA, the Ministry of Natural Resources and Environment (including its provincial and district offices) and the FAO Country Office were involved in different monitoring activities as per the plan. The field monitoring of implementation activities were affected by COVID-19 mobility restrictions in 2020 and 2021. Two activities that had been cited as accomplished in the 2021 PIR were not actually accomplished on the ground. Project management did not identify this accurately in the reporting. For example, work related to a fish hatchery in the Xonabuly District was still in progress and a minor height increase of a spillway had not been implemented. A spillway of some 20 m wide and 500 m of dyke repairs were built by the project in 2020. Then, the second plan to raise the spillway with a minor crest was scheduled for 2021 but not completed in the Nongdern, Kaengkokdong of Champhone District. In fact, the community suggested that they did not need this intervention. One structure in the Pakka village of the Pathoumphone District was near completion at the time of the terminal evaluation visit. The project scope widened and a number of villages – from 24 to 89 – were added in 2019. However, the target indicator in the results framework did not change, that is, the number of community-level beneficiaries was the same in the 2016 results framework as in the 2021 PIR. However, the 2022 PIR (available after the evaluation data collection) corrected this. The achievement percentage was also updated to match the increased population. Project management did not notice the issues to correct them.

Cross-cutting issues: Satisfactory

14. Gender considerations were taken into account while designing the project. Gender equality was a focus in both project design and monitoring. This involved various stakeholders, including the nationally mandated LWU. Indeed, there was a strong emphasis on gender equality throughout project implementation. Further, the project placed importance on the GEF gender mainstreaming policy and the GEF-6 approach on gender mainstreaming and women's empowerment. The project conducted a gender study. A detailed assessment was carried out to explore opportunities for women's economic development and to understand the needs, priorities and approach for achieving the target. Based on that, activities were identified to promote women's empowerment and

gender equality. This information was utilized in the Gender Strategic Plan. Project activities like fishery, chicken raising, fish and non-timber forest product (NTFP) processing, and handicraft were implemented to support women. To some extent, this supported the household economy and family food security, making women's lives more comfortable. Women were actively involved during project development, and the farmers followed the criteria to ensure gender and social concerns. There were gender-specific targets in the results framework, and the project document emphasized gender considerations in project implementation. The district coordinators were also women. The project actively involved the LWU as an implementation partner to review the aforementioned implementation steps and plans. It also reviewed the performance of other partners and supported gender awareness and the implementation of women-focused livelihood programmes. Several community groups were also led by women.

15. The project was developed to address local development threats and wetland vulnerability (including its natural resources, fisheries and biodiversity), and the food security and livelihoods of wetland-dependent communities. Hence, environmental and social concerns were taken into consideration in the design and implementation of the project activities. Project implementation continuously reviewed environmental and social risks and always kept the precautions to environmental and social aspects in mind. The project design identified two medium risks and one high risk for the social dimensions. The annual risk review did not observe any additional risks. The terminal Evaluation Team found no change in the environmental and social risk status, meaning the risk was low. The biannual project progress report (PPR) is the main tool for risk monitoring and management.
16. The terminal evaluation's overall achievement ratings are as follows:
 - i. progress towards achieving the project's development objective: Moderately Satisfactory;
 - ii. overall progress on implementation: Satisfactory; and
 - iii. overall risk rating: likely to achieve Sustainability.

Executive summary table 1. Evaluation summary

Criteria	Rating	Justification for rating
Strategic relevance	S	Highly relevant to the needs of the Lao People's Democratic Republic as wetland management in the context of climate change (along with food security CCA and DRM) is a serious problem and is threatening Ramsar sites and other important wetlands and biodiversity within them, as well as rural livelihoods. In addition, the project helps to address FAO and GEF priorities and is in line with government plans and policies.
Achievement of project results/outcomes (effectiveness)	S	The project achieved most of its targets. Due to delays in the initial years, a small number of the activities were initiated late and were not completed at the time of the terminal evaluation. A few indications of progress towards impact of livelihood activities, FCZs and water management were observed (fish catch volume increases, water availability for dry season vegetables and improved livelihood income from organic vegetables).
Efficiency	MS	The slow procurement and contractual processes of FAO delayed project implementation. The species promoted for organic vegetable farming were appropriate, but there is room for more diversification and increased income for the rural households (and further support in organic pest control). The change in government structure and government and project staff turnover also affected the project by delaying implementation. Veterinary training should have included more practical sessions besides trainings on vaccination. However, the amount of activities implemented in a very limited time indicates efficiency of the team.
Overall likelihood of the risks to sustainability	ML	The capacity of government officers and local communities has been enhanced. Communities are supported on livelihood risk reduction, wetland, fishery and NRM monitoring, and various food security and livelihood improvement activities, which will ensure that technical supports continue for the project results or replicate in other areas. The revolving funds and numerous village-level committees will help to continue activities and bear the cost of replication of activities beyond the project life. Awareness, adaptive learning, investment implementation and livelihood pilot experiences generated among the local communities helps strengthen sustainability prospects. Further to this, the linking of their livelihoods to NRM and fisheries management, wetland conservation and reduced-risk livelihood options reinforces stewardship of local communities in protection of the wetlands and biodiversity, and reducing their climate change (flood and drought) risks. This also secures the food and household economy of the wetland-dependent communities and flood- and drought-impacted communities, making them resilient to climate change impacts.
Overall assessment of factors affecting performance	MS	Lengthy procurement and contracting (LOA) processes, change of government structure, turnover of government and project staff, serious flooding and the COVID-19 pandemic affected the implementation of project activities.
Cross-cutting issues	S	Targets are gender-disaggregated in the results framework and in partner LOA reporting and monitoring. A socioeconomic survey, the LWU review, monitoring and interventions, village-level engagement and participatory planning from various

Criteria	Rating	Justification for rating
		partners also assessed gender sensitivity and gender-specific needs. This was considered in the development and implementation of the project activities. Gender-specific studies and village-level consultations were also conducted to generate more in-depth information and to strengthen activities from a gender perspective. The project also involved the LWU at all levels to implement gender-related activities more effectively and generate awareness on gender aspects.
Overall project rating	S	The project achieved most of the final target by the evaluation. There has already been an improvement in the wetland status and an improvement in livelihoods. Increased income and food security is observed, assuring a move towards the objective of the project.

Note: See Appendix 6 for rating details.

Conclusions

17. **Relevance.** The project was relevant in addressing wetland degradation due to climate change and human activities at two Ramsar sites, the wetland landscapes in general and the surrounding areas. This included an appropriate range of activities to reduce CCA and DRM risks faced by communities, improve food security and enhance livelihood resilience and income. It contributed to achieving FAO Country Programming Framework outcomes, FAO strategies and the GEF priority areas. The implementation of the CAWA project addressed the wetland degradation problem and livelihood issues of the dependent communities. The sectors related to wetland management in the Lao People's Democratic Republic had been very weak in technical capacity and had no information base for supporting evidence-based planning. The CAWA project had activities to establish and document information related to wetlands and the socioeconomic situation of the surrounding villages. This enhanced the capacity of the relevant government institutions and the local communities.
18. **Effectiveness (progress towards results).** The project completed most of its activities. Some of these had already started showing potential long-term impact. The project conducted various awareness raising, adaptive learning, investment implementation and livelihood pilot testing activities for government staff (provincial and district level) and community members. To strengthen activities and make them sustainable, local communities received trainings on the following: on-farm and off-farm livelihood programmes; vulnerability assessments; wetland, fishery, natural resources and reserves management; water management; fishery monitoring; water quality and flood pattern monitoring; water levels; and resources for early warning.
19. The project developed communications and knowledge sharing plans. It celebrated World Environment Day and World Wetlands Day to raise awareness among local students, agencies and people. The project also utilized various meetings, workshops, television channels, radio and print media to disseminate project lessons. The improvement of damaged infrastructure and the renovation of dykes contributed to the re-establishment of previously dry lakes and water bodies. In fact, it increased water level and surface area lakes for the restoration of wetland ecology and fishery refuges, the dry season and other livelihood activities. This has increased household economies, secured food sufficiency and improved nutrition in household diets. The demarcation and official establishment of

wetland reserves and the FCZs has secured these areas from encroachment. It has also secured habitats and refuges for the diversity of native fish species, globally threatened turtles and Siamese crocodiles (*Crocodylus siamensis*).

20. **Efficiency.** The project was delayed due to COVID-19 mobility restrictions and slow procurement and contractual (LOA) processes. Extreme flooding also affected project implementation in extensive areas of the greater Xe Champhone wetlands. The species selected for organic vegetable farming were appropriate for the target sites, but there is room to further diversify species and activities and amplify this to increase income generated from these activities. This is because the present production is insufficient in meeting village demand. There is also a high demand for fish and vegetables from district markets. A larger programme is needed to increase household income so that participants are less vulnerable. The practical session of the veterinary training had difficulties in diagnosing diseases and analysing symptoms. In addition, the organic vegetable programme faced insect damage. Pesticide and fertilizer use, excessive water use and the encroachment of rice crops in natural wetland areas affect the habitats, hydrology and biodiversity of the wetlands. This also affects the food and nutritional aspects of wetland-dependent communities through negative impacts on native fisheries, other natural resources and dry season water resources. There were some concerns as to whether or not project management could accurately reflect progress in the PIR. However, this appears to have been resolved with the final (post-evaluation period) 2022 PIR.
21. **Sustainability.** Project sustainability is likely. The project's activities are also included in government programmes but with a limited budget. Therefore, the project will, to some extent, support future results. Provincial and district government staff were trained to mainstream climate change into their planning. Communities were also trained in various aspects to make project results sustainable. There are Ramsar steering committees at provincial and national levels. These will continue to monitor and support the conservation of the Ramsar sites and the surrounding wetlands. The establishment of revolving funds and village-level management committees will help to continue activities beyond the project's lifespan. Similarly, trained local communities and developed management plans will support wetlands, fisheries, natural resources and other livelihood activities – even after project closure. Villagers were also trained to be trainers so that they can train others in the future.
22. **Factors affecting performance.** The M&E plan was good and comprehensive in its depth and scope, even though it took time to get established after initial problems. The results framework, with clear objectives and components, was appropriate in addressing issues. The design considered the time frame of the project. The activities were appropriate in achieving the outcome and attaining the project's objective. Initially, the livelihood programmes had been limited. These were later expanded and diversified. More target villages led to insufficient time and partner capacity for implementation. The project could no longer address all issues in these areas. Targets also considered gender-disaggregated indicators. The project worked with the relevant institution that had a permanent structure to develop ownership and make results sustainable. The capacity of the implementing agencies was assessed during project development and again during the 2019 project re-design. This element required activities and budget disbursement, which was included in the project design. Project oversight and implementation was affected by COVID-19 in 2020 and 2021. COVID-19 also made the early monitoring of progress challenging.

23. **Cross-cutting issues.** The project involved relevant government institutions (national, provincial and local), community members, the LWU and its local branches, service providers and NGOs. This aspect developed strong ownership over the project results. Gender equality considerations were reflected in the design. This included a greater participation of women in awareness raising trainings. Livelihood programmes and income generation were promoted through fishery and poultry (including management, farming and hatching), livestock feed production, organic farming, fish processing and handicraft promotion. The project conducted gender studies and developed and implemented a gender plan. The LWU's active involvement as a project implementation partner also raised awareness on gender mainstreaming, gender violence and gender-related rules and regulations. Several community groups were also led by women. These were found to be very successful in the effective implementation of activities. It also contributed to developing women's leadership in the villages.

Main recommendations

24. Prioritize and complete any incomplete activities (CAWA, Provincial Office of Natural Resources and Environment, District Office of Agriculture and Forestry, from June to December 2022). The CAWA project team should also work with the implementing government agencies to monitor all project sites. This is to verify the status on the ground.
25. Conduct the demarcation and formation of management committees in the wetlands that are not demarcated. Also, not every village has alternative livelihood programmes and established FCZs. In fact, some important wetlands still need FCZ designation (CAWA, Provincial Office of Natural Resources and Environment, District Office of Agriculture and Forestry, from June to December 2022).
26. Establish FCZs in potential wetlands. Also, more livelihood programmes should be implemented in the expanded villages. The area is very large and the remaining funds may not cover the work. Therefore, another megaproject should be developed to include these activities in the future (CAWA, Provincial Office of Natural Resources and Environment, Provincial Office of Agriculture and Forestry, from June to December 2022).

Recommendations for future project development

27. Diversify income generation and alternative livelihood programmes for future projects. Poor households and women should be prioritized. More economically valuable species, greater production quantities and tapping into village and district markets can bring additional economic benefits to farmers and strengthen their resilience.
28. The Ministry of Natural Resources and Environment should coordinate with other donor agencies to replicate lessons from this project (Ministry of Natural Resources and Environment, start exploring in June 2022).
29. Conduct baseline studies for future projects. A baseline of all activities is needed so that change from project intervention can be analysed.

1. Introduction

1. The monitoring and evaluation (M&E) policy at the project level through the Food and Agriculture Organization of the United Nations (FAO) and the Global Environment Facility (GEF) has two overarching objectives that promote: i) accountability for the achievement of GEF objectives through the assessment of results, effectiveness, processes and the performance of the partners involved in GEF activities; and ii) learning, feedback and knowledge sharing on results and lessons learned among the GEF and its partners as a basis for decision-making on policies, strategies, programme management and to improve knowledge and performance. With this in mind, this terminal evaluation was initiated by FAO in the Lao People's Democratic Republic as the GEF implementation agency for the Climate Adaptation in Wetlands Areas in the Lao People's Democratic Republic project to measure the effectiveness and efficiency of project activities in relation to the stated objectives. It also aimed to collate lessons learned.

1.1 Purpose of the terminal evaluation

2. The main purposes of the terminal evaluation are to:
 - i. objectively assess progress for accountability so that future investments can be guided;
 - ii. provide a summative assessment in capturing and documenting progress through this investment (knowing that context and plans may have changed over time); and
 - iii. provide a formative assessment for FAO and stakeholders with evidence on what may be the most productive future approaches in the Lao People's Democratic Republic and more widely.

1.2 Objectives of the terminal evaluation

The objectives of the terminal evaluation are to:

- i. examine the extent to which the project has achieved its stated objectives and outcomes;
- ii. provide an assessment of the project's performance, gender-disaggregated achievements and vulnerable and targeted groups, as well as the implementation of planned project activities and planned outputs against actual results;
- iii. determine the likelihood of progress in climate change adaptation (CCA), disaster risk management (DRM), natural resources management (NRM) and food security in flood-affected lowland sites, as well as wetland management being sustained due to contributions from project interventions;
- iv. understand the critical enablers for progress and the barriers to progress for the project components and activities;
- v. identify project successes in order to promote reliability; and
- vi. synthesize lessons learned that may help in the design and implementation of future FAO and FAO-GEF initiatives in the wetland management sector.

1.2.1 Evaluation criteria and principles

3. The terminal evaluation was an independent review. The Evaluation Team assessed evidence against the criteria in the FAO-GEF Monitoring and Evaluation Policy and adhered

to the guidelines for planning and conducting terminal evaluations of FAO-GEF projects and programmes (GEF, 2017a). These factors are outlined in the following points.

- i. Relevance – the extent to which the activity is suited to local and national development priorities and organizational policies, including changes over time.
- ii. Effectiveness – the extent to which an objective has been achieved or how likely it is to be achieved.
- iii. Efficiency – the extent to which results have been delivered with the least costly resources possible.
- iv. Sustainability – the likely ability of an intervention to continue to deliver benefits for an extended period of time after completion. The project needs to be environmentally, financially and socially sustainable.
- v. Factors affecting performance – the main factors to be considered are:
 - project design and readiness for implementation (e.g. sufficient partner capacity to begin operations, changes in context between formulation and operational start);
 - project execution, including project management (execution modality, as well as the involvement of counterparts and different stakeholders);
 - project implementation, including supervision by FAO (Budget Holder, Lead Technical Officer, Funding Liaison Officer), backstopping and general Project Task Force input;
 - financial management and mobilization of expected co-financing;
 - project partnerships and stakeholder involvement (including the degree of ownership of project results by stakeholders), political support from the government, institutional support from operating partners (such as provincial and district branches of the Ministry of Natural Resources and Environment and the Ministry of Agriculture and Forestry);
 - communications, public awareness and knowledge management; and
 - application of an M&E system, including M&E design, implementation and budget.
- vi. Cross-cutting dimensions – gender, Indigenous Peoples and minority group concerns and human rights, which are aspects that involve environmental and social safeguards (ESS) and a review of the ESS risk classification and risk mitigation provisions identified during the project's formulation stage.

1.2.2 Stakeholder analysis

1.2.2.1 Beneficiaries of the project

4. The main beneficiaries of the project are outlined as follows:
 - i. The Ministry of Natural Resources and Environment benefits from the project as it contributes to the management of all wetland landscapes and adjacent areas, and various activities both within them (CCA, DRM, NRM, ecosystems, water resources) and the adjacent floodplains. The project had programmes to enhance the capacity of this institute.
 - ii. The Ministry of Agriculture and Forestry benefits from the project because it is the responsible party for sectors like horticulture, agriculture, livestock and fisheries. These are associated with wetland management. The Ministry of Agriculture and

- Forestry and its provincial and district staff also benefit from training activities that enhance their capacity.
- iii. The Lao Women's Union (LWU) benefits from gender mainstreaming activities as they contribute to the organization's mission to strengthen women's role in society.
 - iv. The Ministry of Information, Culture and Tourism benefits from the development of district-level community-based ecocultural tourism and investment sites as part of the provincial tourism development plan. This involves a climate-adapted off-farm livelihood development option for flood- and drought-affected communities.
 - v. FAO serves as the GEF agency for this project. FAO benefits from this project as it provides the Organization with the opportunity to utilize its experience and learn from other partners.
 - vi. Civil society organizations, national and international non-governmental organizations (NGOs), academia and scientific organizations also benefit from the project.
 - vii. Local communities benefit from opportunities to learn from project implementation. In fact, the involved communities directly benefit from the project's various activities, investments and lessons learned. The capacities of local communities and government agencies are enhanced through trainings, planning, management and implementation via learning-by-doing, adaptive research and action-oriented processes. They also benefit from climate and disaster risk reduction, food security enhancement, livelihoods promotion, livelihoods diversification and environmental impact-reducing activities.
5. Cross-cutting issues. The project's cross-cutting issues included considerations on gender, Indigenous Peoples and minority group concerns and human rights. The ESS applied to the project also required a review of the ESS risk classification and risk mitigation provisions that had been identified during the project's formulation stage and considered while designing and implementing the activities.
6. The terminal evaluation adhered to the Evaluation Consultant Code of Conduct Agreement, as outlined in the guide for planning and conducting the terminal evaluations of FAO-GEF projects (2020, internal document).

1.3 Intended users

7. The main users of the terminal evaluation report are detailed as follows:
- i. The Ministry of Natural Resources and Environment, the Ministry of Agriculture and Forestry, the Ministry of Information, Culture and Tourism, and the LWU can use this report for insights and learning on future investments, as well as decisions on scale ups and policy development.
 - ii. The FAO-GEF Coordination Unit and the GEF project formulators can use this report for programme improvement and organizational development, making use of valuable information for managers or those responsible for programme operations and the design of future initiatives. The information is also used to support accountability for GEF funds.
 - iii. FAO staff and other stakeholders are expected to consider the evaluation's findings and outcomes, use them to account for the investment and shape future initiatives in this sector.

- iv. Participating communities and local authorities can use this report to convey their assessment of progress and advocate for continued support and improvement.
- v. Partner organizations can utilize insights and learnings from this report for the future design of initiatives and advocacy work.
- vi. Other donors involved in this project can reflect on findings to guide possible future investments.
- vii. Academia, networks and sectoral experts can use these findings for wider research and advocacy work, especially for analysing wetland management.

1.4 Evaluation approach and method

8. The evaluation adopted a qualitative and theory-based approach. The main analysis method was content analysis. A documentation review; semi-structured interviews and face-to-face interactions were used to collect data from secondary and primary sources. This evaluation was conducted through field missions and online interviews.
9. This project was mainly implemented in partnership with the government at national and provincial (district) levels. The majority of stakeholders were interviewed face-to-face. Both consultants interviewed some stakeholders virtually. A total of 143 people, including 47 women, were interviewed during the evaluation mission. This includes: FAO staff in the Lao People's Democratic Republic, the CAWA Project Management Unit (PMU) in both Vientiane and the field; the International Union for Conservation of Nature (IUCN); the Ministry of Natural Resources and Environment; the Ministry of Agriculture and Forestry; the Provincial Office of Natural Resources and Environment; the Provincial Office of Agriculture and Forestry; the District Office of Natural Resources and Environment; the District Office of Agriculture and Forestry; provincial and district officers from the LWU; the French NGO, Tétraktys; village offices; community groups; and farmers. The interviews and site visits were conducted in 24 out of 89 villages (27 percent of the project sites) within four districts of two provinces (see Appendices 2 and 7). Stakeholders were categorized based on their responsibilities in the project, and only questions that were relevant to them were used during their interviews (see Appendix 7).
10. The sampling size was not predetermined due to time constraints. Despite this limitation, efforts were made to reach as many stakeholders as possible and to cover the range of project activities that had been undertaken. It was not possible to randomize the village sample due to early, heavy rains that had flooded several villages, making them inaccessible. As a result, efforts then focused on reaching as many of the accessible villages as possible within the available time frame and ensuring that a satisfactory coverage of project activities were assessed.
11. Data were collected, interpreted and analysed to answer the evaluation questions and subquestions as per the evaluation matrix. The project's theory of change (TOC) and its results framework were key starting points for guiding the assessment of the evaluative dimensions.
12. The evaluation adhered to the FAO-GEF norms and standards and was in line with the guide for planning and conducting the terminal evaluations of FAO-GEF projects (UNEG, 2020). The evaluation adopted a consultative and transparent approach with internal and external stakeholders throughout the process. The Evaluation Team members were ensured ethical approaches at all stages of the evaluation cycle.

13. The evaluation was evidence-based and conducted through the following participatory approach:
 - i. A thorough review of the project document and other relevant texts available when the evaluation data collection process was conducted. This included: project documents; the revised logframe; monitoring reports, such as progress and financial reports prepared for FAO and the latest available annual Programme Implementation Reports (PIRs) and project progress reports (PPRs) for the GEF; project meeting minutes; relevant correspondence; and other project-related material produced by the project staff or partners.
 - ii. Extensive face-to-face interviews by both consultants were carried out along with virtual interviews for a few stakeholders who were unable to meet with the Evaluation Team. Stakeholder views were underscored throughout the evaluation. The purpose of the evaluation was to measure the relative success of implementation and to determine lessons learned for the wider GEF context – not to place credit or blame. The stakeholders were reassured of this, and the confidentiality of all interviews was stressed. Independent views from respondents were presented without citing names. The collected information was cross-checked and triangulated among various sources to ascertain its veracity and to identify areas where different views are expressed by different stakeholder groups.
14. The terminal evaluation matrix and evaluation guidelines supported the interviews (see Appendices 3 and 7). Please note that some evaluation questions were merged as the evaluation progressed. This was done where overlaps and repetition became apparent. As a result, the findings numbers differ from those in the evaluation matrix of this report.
15. The terminal evaluation reviewed the progress towards results that had been expected in the TOC. It analysed whether or not the achievements contribute to the accomplishment (or possible future accomplishment) of the outcomes expected in the TOC and if project implementation followed its envisaged path. This was assessed based on data provided, as well as results verified during the terminal evaluation mission through stakeholder feedback and site observations. The terminal evaluation mission commenced on 7 May 2022. It was completed on 28 May 2022 after the end of the field mission and a debriefing.

1.4.1 Evaluation steps

16. The evaluation included the following steps:
 - i. inception phase
 - The inception report was prepared based on a preliminary document review and discussions conducted with partners and FAO Project Task Force members to further understand the evaluation focus.
 - ii. documentation review
 - The terminal Evaluation Team reviewed all available project documents to assess the performance of the GEF CAWA project in wetland areas of the Lao People’s Democratic Republic. The list of documents are provided in the Bibliography.

iii. primary data collection

- The primary data collection involved online interactive platforms, such as Zoom, field visits and face-to-face interviews by both consultants with national-, provincial-, district- and community-level stakeholders. The information from these different groups of stakeholders were used to triangulate information from the progress reports. The Evaluation Team made an attempt to cover the maximum number of sites (24 out of 89 villages) and interact with all stakeholder groups. Records of the district-based offices and community group records on various subjects (income, training information, village fund management, community decisions and actions, benefit distribution, services provided, etc.) were also studied for indications on the effectiveness of project activities. Evidence of changes made by the project were assessed by collecting information on various areas since the baseline information of several activities were not available. These included changes in income, water level, livestock mortality and food security. Evidence such as records on the monitoring of fish catches, the number of species and the water level were also useful to assess the project interventions. Interactions with national, provincial and district officers helped to understand other dimensions of change from the project interventions, for example, knowledge and capacity changes.

iv. data analysis

- Information regarding project achievements was obtained by reviewing the related documents. The aforementioned primary data confirmed and complemented this. The findings were verified and triangulated through interviews at different levels, namely national, provincial (FAO Country Office, Project Management Unit [PMU], Provincial Office of Natural Resources and Environment, District Office of Natural Resources and Environment, Provincial Office of Agriculture and Forestry, LWU, IUCN) and district levels (District Office of the LWU, District Office of Natural Resources and Environment, District Office of Agriculture and Forestry), as well as the community level (community groups on different subjects, individual farmers).
- Relevant reports were analysed to confirm if the results were on track and if the project achieved its objectives and goal. It was not possible to analyse discernible progress towards long-term change or impact due to the lack of baseline data on some indicators (Outcomes 2.3, 2.4 and 3.3; Outputs 2.2.1 and 2.4.1). Fishery conservation zone (FCZ) and other wetland changes were analysed based on site observation, water level information, fish diversity and density from fisherfolk, and beneficiary interviews.
- The evaluation also analysed how certain factors either contributed to or hindered the achievement of project results. FAO gender mainstreaming and gender equity policies were used to compare achievements from gender perspectives, particularly FAO's gender equality objectives: i) equal decision-making; ii) equal access to productive resources; iii) equal access to goods and services for agricultural development and the market; and iv) the reduction of women's work burden.
- A post-training evaluation study was planned to analyse changes in knowledge given the project's emphasis on capacity development. However, the project did not conduct a before and after assessment of participants.

Regardless, the use of such knowledge was monitored in activities, and stakeholder discussions included questions to confirm knowledge levels.

- The evaluation focused on gender aspects through a document review to assess evidence on the participation of women from project development to implementation and benefit distribution. Similarly, information on women's access in decision-making and the project's contribution to building leadership was analysed in interviews with village committees, village heads and farmers. Questions were also raised on the existence of women's groups, formation processes, female-targeted capacity enhancement activities, women's roles on committees and the participation of women in overall activities.
- To analyse awareness level changes, informants were asked questions related to climate change impacts on wetlands, the importance of wetlands, the importance of biodiversity for wetlands, vaccination for animals and birds, and water and wetland management.
- The guiding questions for analysis are in the evaluation matrix (see Appendix 3).

v. project implementation rating

- Based on the aforementioned category assessments, the terminal Evaluation Team assigned one overall project implementation and adaptation management rating from the six-point scale: Highly Satisfactory (HS); Satisfactory (S); Moderately Satisfactory (MS); Moderately Unsatisfactory (MU); Unsatisfactory (U); or Highly Unsatisfactory (HU) (see Appendix 6).
- The sustainability criteria were analysed according to four categories of sustainability: financial; socioeconomic; institutional framework and governance; and environmental. The risks that are likely to affect the continuation of the project outcomes were also assessed.
- The delivery status of each project indicator was rated using the scale (see Appendix 6). All recommendations provide details on who is responsible for carrying out the follow-up actions, the task and its time frame, and what the deliverable should be. A suggestion may be provided where a formal recommendation is inappropriate. Appropriate lessons learned that were extracted from the evaluation are included.

17. The Evaluation Team composition and profile is as follows:

- i. Arun Rijal (team leader) and Bounthong Sengvilaykham (team member)
- ii. The team members have experience in project evaluation, project and programme management, policy development, capacity assessment and development, gender and social inclusion (gender equality and gender mainstreaming), the economics of climate change, qualitative and quantitative data collection and analysis, and result-based management evaluation.

1.5 Limitations and risks

18. Time limitations, distance among sites and inaccessibility caused by early rain meant that the terminal Evaluation Team visited 16 villages within two provinces and four districts. Here, they conducted face-to-face interviews with stakeholders and beneficiaries and observed activities on the ground. Flooding blocked access to some of the villages. As a result, the Evaluation Team could not visit them to verify project progress. The sample was then confined to accessible sites. The Evaluation Team interviewed 143 individuals within the time frame, including 47 women. This involved a reasonable number of local stakeholders and project activities. Some assumptions had to be made on this being a reasonable reflection of the whole project, supported as much as possible by reports and the document review.
19. The international consultant was not able to interact directly with beneficiaries and stakeholders in the field due to the language barrier. The national consultant translated the dialogues, which slowed down interactions. The results framework had some indicators without a baseline for analysing achievements made by some of the project interventions. Similarly, data regarding changes in fish population and income diversity and change were not available. The Evaluation Team had to rely on feedback from the beneficiaries.

2. Project background and context

20. Communities living in and around the wetland sites and Ramsar-protected areas are highly dependent on the natural resources from the local area. The impact of climate change in the form of floods and droughts, as well as community and development pressures on these natural resources, have affected the food security and livelihood of these communities. This project originally selected two Ramsar wetlands of the Lao People's Democratic Republic: Xe Champhone in Savannakhet Province; and Beung Kiat Ngong in Champasak Province. The focus was later expanded to all wetland landscapes surrounding these reserves. This Champhone District is considered the rice bowl of the country due to its ability to grow large surpluses of rice. These wetlands provide water for rice growing, as well as benefits from fisheries, livestock, vegetables and non-timber forest products (NTFPs). They are also an important habitat for threatened species of fish, turtles and crocodiles. Climate change will have a big impact, both positive and negative, on these ecosystem services from the wetlands. In fact, it has already led to an increased vulnerability of local communities to disasters (irregular floods and droughts). The project aimed to improve understanding and capacity among these communities and relevant government agencies so that they are better able to adopt adaptive strategies that address key barriers. Such challenges include: inadequate knowledge and understanding of climate change impacts and the complex and interrelated nature of vulnerabilities to climate change and natural disasters; limited knowledge and experience for the development and implementation of specific CCA messages; and general, sector-specific, long-term CCA planning that has not been translated or integrated into local planning nor informed by proven CCA measures.
21. The FAO-GEF project, Climate Adaptation in Wetlands Areas in the Lao People's Democratic Republic, started on 30 June 2016. Its closing date at the time of the terminal evaluation was set for 30 June 2022. The project's revised end date was extended until 31 December 2022. FAO was the executing and implementing agency under a direct implementation modality (direct execution, DEX). The executing partners were the Ministry of Natural Resources and Environment and the IUCN. The project had a GEF budget of USD 4 717 579 and an intended co-financing of USD 15 367 380.
22. The project's original development objective aimed to reduce climate change vulnerability of the communities and the fragile wetland ecosystems upon which they depend. This was re-worded during the 2019 project review to reduce the climate change vulnerability of communities and to reduce pressures on the threatened wetland ecosystems upon which they depend. In fact, this reflects the reality that wetlands actually benefit from more climate change-related floods yet are highly threatened by community and development pressures.
23. The Xe Champhone Ramsar site covers 12 400 ha and includes 14 villages with a total population of about 7 000 people. The IUCN proposed to expand this site under the project in 2013. It would cover 45 000 ha, including 40 villages with 20 000 people. In 2019, CAWA adopted a final project focus: 66 800 ha of the greater Xe Champhone wetland landscape, including over 74 villages with 71 127 people. The Beung Kiat Ngong Ramsar site covers an area of 2 360 ha, including 13 villages and about 11 500 people. In 2019, CAWA further adjusted the Beung Kiat Ngong project focus to a total wetland and near-catchment area covering 7 000 ha and 14 villages.

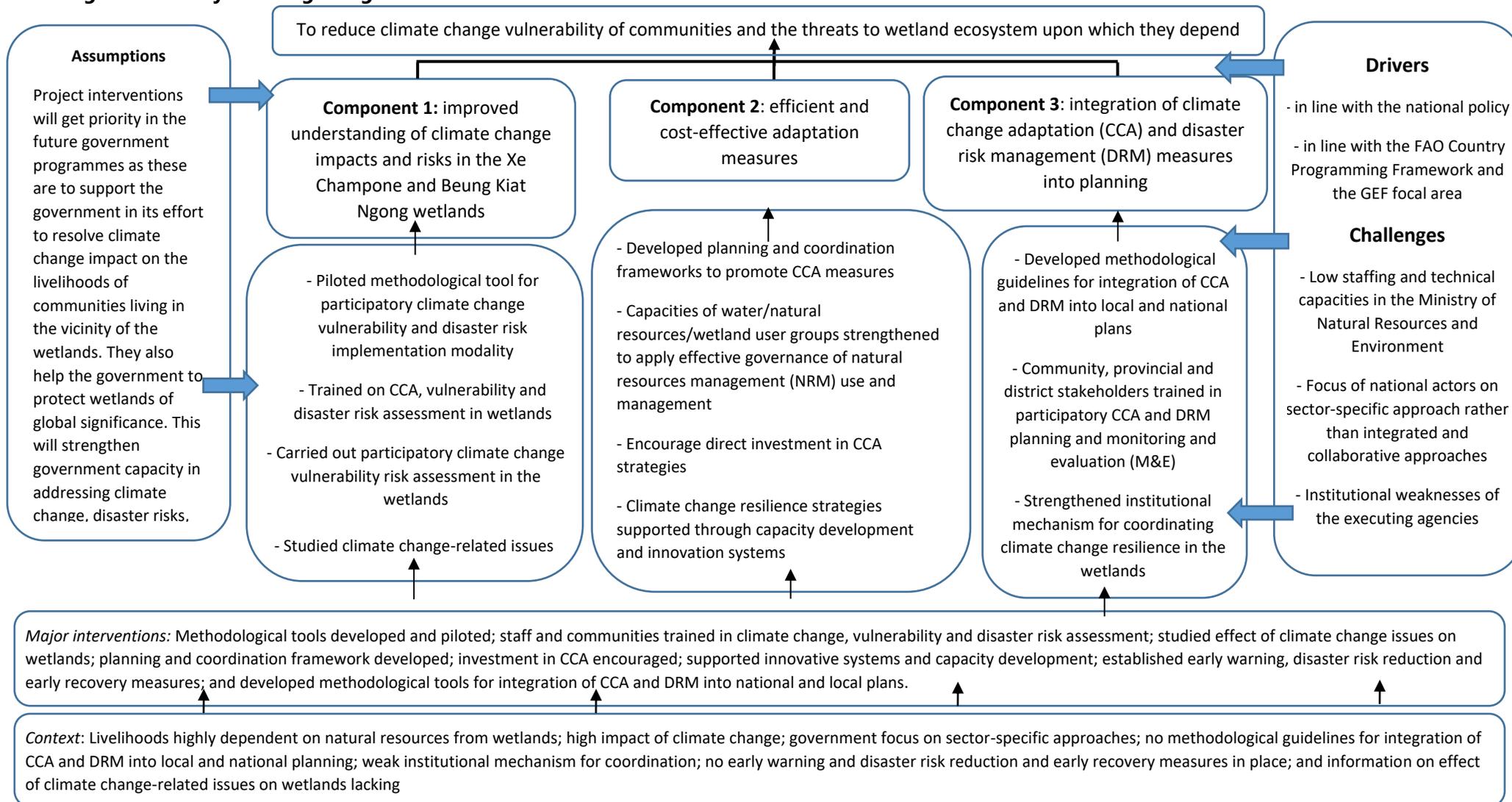
24. The project strategy aimed to improve the ability of the local people so that they can adapt their livelihoods both within and around these wetland areas. This way, they can reduce their vulnerability to climate change. The project used a combined landscape- and ecosystem-based adaptation and nature-based approach. This included a combination of improved planning and implementation modalities and governance conditions, direct investments in CCA measures and livelihood strengthening, and support for climate change-resilient forms of sustainable use. There was a strong focus on creating lasting capacities among national stakeholders at all levels to sustain and replicate these benefits.

3. Theory of change

25. The project's objective was to reduce climate change and disaster vulnerabilities of communities and to reduce threats on the wetland ecosystems upon which they depend. The strategy from the GEF project document aimed to develop a comprehensive plan of actions that would support knowledge on climate change impacts and risks, implement adaptation measures, and integrate CCA and DRM measures into planning and implementation. The GEF results matrix pathway that would bring about this outcome was based on three different medium-term outcomes:
- i. improved understanding of climate change impacts and risks and the enhanced capacities of communities and local and central administrations to design, prioritize and implement CCA and DRM measures in the two target wetlands;
 - ii. efficient and cost-effective measures in place to reduce the impact of climate change and natural disasters on wetland ecosystems and local livelihoods; and
 - iii. efficient and cost-effective CCA and DRM measures integrated into planning processes.
26. The GEF project document did not delineate a TOC with a clear definition of actions or processes that needed to be implemented by community, provincial and district partners to achieve field-level CCA and DRM results. The results matrix objectives were too generic and not well understood by implementing partners as an action framework or basis for letter of agreement (LOA) development. In response, the 2019 project redesign defined a clear TOC action framework with a community and local agency action framework that focused on two sets of objectives:
- i. community objectives
 - reduce climate change and natural disaster risk (CCA/DRM)
 - reduce impacts on wetlands
 - increase food security
 - increase livelihood profitability and resilience
 - ii. wetland objectives
 - improve site protection and management
 - improve NRM (wetland, fisheries, water)
27. The project planned to utilize the government's existing institutional setup to implement project activities. It also decided to involve the IUCN. This way, it could benefit from experience of the IUCN in implementing gender mainstreaming activities related to Outputs 1, 2.2 and 3.2. The project selected institutions, assessed capacity and reviewed existing policies to identify the gaps in mainstreaming climate change into planning processes. The baseline scenarios were used to develop appropriate project and implementation modalities. Component 1 was expected to achieve its outcomes through four outputs, Component 2 through five outputs and Component 3 through three outputs.
- i. Component 1 contributed to an improved understanding of climate change impacts and risks in the targeted wetlands. Moreover, the capacity of local communities and local and central administrations would be enhanced to design, prioritize and implement CCA and DRM measures in the two target wetlands.

- ii. Component 2 contributed to the establishment of efficient and cost-effective measures to reduce the impact of climate change and natural disasters on wetland ecosystems and local livelihoods. It included: developing a planning and coordination framework for two sites that promote CCA measures; strengthening the capacities of water, natural resources and wetland user groups for the effective governance of use and NRM; encouraging investment in CCA strategies; supporting climate change resilience strategies through capacity development programmes and innovation systems; and establishing early warning, disaster risk reduction and early recovery measures.
 - iii. Component 3 contributed to the integration of CCA and DRM measures into planning processes. It had activities to develop methodological guidelines for the integration of CCA and DRM into local and national plans; and a training programme for community, provincial and district stakeholders in participatory CCA, DRM planning and M&E.
 - iv. The project design identified three categories of risk:
 - low staffing and technical capacities at the Ministry of Natural Resources and Environment may affect institutional sustainability;
 - national actors that focus on sector-specific approaches rather than integrated and collaborative ones may impact the effectiveness and sustainability of the results; and
 - growing pressures on the wetland ecosystems may go beyond the coping capacity of the proposed adaptation strategies.
28. The risk level of growing pressures on wetland ecosystems was considered high, while the other two risks were considered medium. The project design provisioned mitigation measures to address these risks. An annual review of risks was included to update this status and identify new risks, if any.
29. The project planned to achieve this goal through four main outcomes:
 - i. Outcome 1, improved understanding of climate change impacts and risks in the Xe Champhone and Beung Kiat Ngong wetlands (with provincial and district stakeholders and enhanced capacities to design and implement CCA and DRM measures);
 - ii. Outcome 2, efficient and cost-effective adaptation measures in place to reduce the impact of climate change and natural disasters on wetland ecosystems and local livelihoods;
 - iii. Outcome 3, efficient and cost-effective CCA and DRM measures in wetlands integrated and budgeted into local and national planning processes; and
 - iv. Outcome 4, effective M&E and sharing of knowledge, lessons learned and activity visibility to verify project results and impact.
30. The TOC diagram, developed by the project team, is presented in Figure 1.

Figure 1. Theory of change diagram



Source: Elaborated by the Evaluation Team.

4. Key findings

4.1 Relevance

Evaluation question 1. To what extent has FAO and GEF's support to targeted areas been relevant? How did the project design respond to the needs, priorities and capacities of the project's main counterparts?

Finding 1. FAO and the GEF support to target areas has been relevant. The project was designed according to the needs and priorities of the Lao People's Democratic Republic. The design also considered the capacity of the main counterparts.

31. It is important to situate the project in the broader context. Projections state that the temperature will increase by around 0.80 °C in the Mekong River basin. Potential evapotranspiration will increase in all months and catchments by an average of around 0.03 m (+2 percent). Annual rainfall will increase by around 0.2 m (+13 percent), and the annual mean Mekong River flow will increase between 4 and 13 percent in the wet season and between 10 and 30 percent in the dry season. By 2050, minimum and mean temperatures will increase by up to 20 °C. Maximum temperatures will increase by up to 50 °C. Rainfall will increase with considerable seasonal variations. This may delay the start of the main wet season. There may also be a false start to the wet season in April (FAO and GEF, 2016). These projections clearly indicate that climate variability will challenge farmers greatly. There is growing evidence on extreme events with extreme temperatures: fewer cold nights, more hot nights; heavy rainfall; tropical storms; and typhoons. Climate change will impact the biodiversity of the two Ramsar sites and other wetlands from the surrounding areas. It will also affect habitats through increased sedimentation and the disappearance of deep pools and river beds and open wetlands. Higher temperatures and lower rainfall in the dry season devastates grassland. Peatland and freshwater marshes may dry out. Such habitat changes may encourage invasive species. Pests will damage crops, decrease livestock production, and change the fish population and NTFPs. All of this will affect the livelihood of those dependent on wetlands. Therefore, this project is relevant to wetland populations. It helps them adapt to the changes created by climate change.
32. The project was designed to implement efficient and cost-effective adaptation measures that reduce the impact of climate change and natural disasters on wetland ecosystems and local livelihoods. The project would contribute to integrating evidence-based, efficient and cost-effective CCA and DRM measures in wetlands through local and national planning processes for long-term sustainability. The project is implemented in two wetland areas of the Lao People's Democratic Republic, which are also the country's only declared Ramsar sites: Xe Champone and Beung Kiat Ngong. The project originally selected a scope of 21 000 inhabitants from 20 villages, which are highly dependent on Ramsar wetland sites, and another 42 000 inhabitants from 40 secondary tier villages that are also dependent on the goods and services provided by the broader wetlands landscape. The revision of the project's scope in 2019 covered 74 800 inhabitants in 88 villages and several other wetlands that are important from a biological and socioeconomic point of view. These people are highly exposed and vulnerable to climate change impacts, higher temperatures, evapotranspiration, and the incidence and intensity of storms. The lack of adaptation knowledge and alternative livelihood options make the future of these people and the wetlands uncertain.

33. There are several barriers in addressing climate change vulnerability related to the wetlands and livelihoods, including: i) a lack of knowledge and understanding on climate change impacts and risks; ii) a lack of CCA and risk reduction measures; iii) a lack of integration of CCA and DRM measures into planning processes; and iv) inadequate access to financial and operational resources. The project was designed to address these barriers in order to safeguard the livelihoods of the local communities against climate change.

Evaluation question 2. How did the project design respond to the priorities of the FAO Country Programming Framework and the GEF focal areas/operational project strategies?

Finding 2. The project design responded to the priorities of the FAO Country Programming Framework, the FAO Strategic Framework (FAO, 2021), and the GEF focal areas and operational project strategies.

34. The project supports the 2016–2021 FAO Country Programming Framework (FAO, n.d.), specifically Outcome 1, fostering agricultural production and rural development; Outcome 2, improved food security and nutrition, with special focus on the most vulnerable (for example, poor women, food-insecure farm households); and Outcome 4, improving capacity of government and communities to respond to food and agricultural threats and emergencies and the impact of climate change. It contributes to FAO's Strategic Framework, specifically Strategic Objective 5, increase the resilience of livelihoods to threats and crises and Outcome 5.3, countries reduced risks and vulnerability at household and community level (FAO Office of Evaluation, 2016). It also contributes to the Regional Priorities by addressing CCA and mitigation (paragraph 24 (g) of the report) (FAO, 2020).
35. The project aligns with four of the GEF results-based management framework elements on CCA (GEF, 2011): Component 1 with Objective CCA-2 Outcome 2.1, increased knowledge and understanding of climate variability and change-induced risks at country level and in targeted vulnerable areas; Component 2 with Objective CCA-1 Outcome 1.2, reduce vulnerability in development sectors and Outcome 1.3, diversified and strengthened livelihoods and sources of income for vulnerable people in targeted areas; and Component 3 with Objective CCA-1 Outcome 1.1, mainstreamed adaptation in broader development frameworks at country level and in targeted vulnerable areas. In 2010, the Lao People's Democratic Republic ratified the Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar Convention). The project also aligns with this global commitment.
36. The project is oriented towards the 2009 National Adaptation Programme of Action to Climate Change (The Lao People's Democratic Republic, 2009) under the Ninth Conference of the Parties to the United Nations Framework Convention on Climate Change, the National Strategy on Climate Change (The Lao People's Democratic Republic, 2010) and the National Integrated Water Resources Management Plan. It is also aligned with the Eighth Five-year National Socio-economic Development Plan (2016–2020) (Ministry of Planning and Investment, 2016) and supports the adoption of the Ramsar Convention (Article 6.6.1) (UNESCO, 1994). Moreover, it also encourages river basin management plans as integrated water resources management.

Evaluation question 3. Are the project's expected outcomes congruent to the needs and priorities of the targeted beneficiaries (local communities, men and women, indigenous communities, etc.)?

Finding 3. The project outcomes are congruent to the needs and priorities of the targeted beneficiaries.

37. The project design thoroughly assessed the problems related to wetland management and the capacity of the relevant institutions and communities. It also explored opportunities for economic development of the communities. Several consultations were held with a wide range of stakeholders during project design to identify the issues and needs of the target areas. The project was formulated based on that information, and the activities were relevant in addressing the gaps in wetland management and local economic development. Importantly, there was an identified threat to the wetlands due to encroachment. There was also a need to manage water for rice cultivation and wetland biodiversity. The design highlighted the need to involve local communities in wetland management so that local guardianship could be established. It was recognized that the conservation of local fish species and support to the local economy and food security were priorities for the communities. It was also necessary to enhance the knowledge of relevant government staff and to mainstream wetland management and CCA into national development planning. This made the project design able to capture the needs and priorities of the local communities, as well as of the institutions working in wetland and livelihood support. In 2019, the project's scope opened to the previously excluded surrounding wetlands. This included additional livelihood activities to address biological and socioeconomic aspects that had been identified during the design phase. All beneficiaries consulted during the evaluation indicated that the project was congruent with their needs and priorities. Both men and women were consistent on this point.

Evaluation question 4. To what extent was the technical support provided by FAO relevant to the country?

Evaluation question 5. To what extent were FAO's comparative advantages and existing complementarities with other partners taken into account in the project design?

Findings 4 and 5. FAO's technical support was relevant to the country in terms of strengthening its technical capacities. The project design considered FAO's comparative advantages and existing complementarities with other partners.

38. FAO helped to improve knowledge among government staff and community members on climate change impact and risks and disaster management. It did so through trainings and by involving them in the vulnerability assessment. The project's technical support was based on an assessment of the capacity of government institutions. Involved stakeholders benefited from FAO's experience in the field of sustainable agriculture and wetland management and applied this to various project activities. An appropriate subject expert, a FAO Project Manager, led project implementation. The project provided guidance to wetland restoration and management activities and linked sustainable agriculture and livelihood promotion to this. The FAO-led team also expanded the target areas by including more villages. This was based on technical findings from a study on hydrological and ecological functions in the Ramsar sites and other surrounding wetlands. The broader landscape approach helped to protect all wetlands that are connected to Ramsar sites through hydrological and ecological functions. FAO designed this project holistically by relying on its experience and expertise. In fact, FAO ensured the inclusion of sustainable forestry, wetland, fisheries, agriculture and water management technologies and approaches. It also established sound community-based participatory approaches. Its technical support included trainings, information, communications, tools, equipment and advisory services for institutional strengthening, policy reform and national programming. FAO is the lead agency in gathering and disseminating data and information related to sustainable forest management, fisheries (FAO, 2023a), agriculture (OECD and FAO, 2019),

wetlands, NRM and climate change. These are built on scientific knowledge, local experience and innovation, and made available to national stakeholders through FAO websites and information systems like the Corporate Database for Substantive Statistical Data, that is, FAOSTAT (FAO, 2023b).

39. FAO also involved the IUCN as a service provider for wetland activities. The IUCN supported all technical project outputs except for Output 2.4, which was under FAO responsibility. The IUCN brought significant technical skill and local field experience from 26 years of work with the Government of the Lao People's Democratic Republic on water and wetland-related activities. The organization has a well-established, highly qualified team with consultants in the region. They brought expertise to the country's wetland areas, hydrology, governance, community development and sustainable livelihood alternatives. Government staff acknowledged the contribution of FAO and its partners in enhancing their technical capacity and in mainstreaming wetland management into national planning activities. Similarly, Tétraktys has extensive experience in renovating cultural and historical sites and promoting ecotourism in the country. The involvement of these NGOs brought considerable knowledge to the project.

Evaluation question 6. Have there been any changes in the relevance of the project since its formulation?

Finding 6. The relevance has not changed since project formulation. The project remains very important and relevant to the sites, the government and the communities.

40. The problems facing the wetlands and wetland-based livelihoods has not changed. Rather, these challenges have intensified since project formulation. The activities identified in the project document to address the climate change-induced issues of these Ramsar sites and the surrounding areas are still valid. COVID-19 restrictions affected livelihoods due to market closures and subsequent food shortages. The project activities helped to provide locally produced vegetables, fish and other livestock products for local consumption and trading. The supply of fish fries from Thailand halted during this period. However, the fish fries produced by project-supported hatcheries contributed to meeting farmers' needs. These aspects still need a lot of work, but lessons on gains and local resilience to shocks may be useful for future interventions. As discussed in other sections, the project design did not require significant changes. Regardless, there are opportunities to further diversify livelihood activities. The evaluation found a potential for more income by helping communities meet a high demand for local vegetables, fish and animal products from district markets. High-value, local varieties of vegetables and animal species should be promoted to provide more options to farmers. It is noted that wetland demarcation was not achieved at all important sites following the move from 24 to 89 villages. Essentially, the budgetary resources did not correspond to this increase. Any future investment would need to consider such potential and ensure sufficient resources to cover all project sites.

Evaluation rating for relevance: Satisfactory

4.2 Effectiveness (progress towards results)

41. This project aimed to reduce the climate change vulnerability of communities and reduce pressures on the wetland ecosystems upon which they depend. It focused on a better understanding of climate change impacts and risks in the Xe Champhone and Beung Kiat Ngong wetlands. To do so, the project enhanced the capacities of the communities and the

local and central administrations to design, prioritize and implement CCA and DRM measures in the target wetlands. The introduction of efficient and cost-effective measures helped to reduce the impact of climate change and natural disasters on wetland ecosystems and local livelihoods. This also contributed to the integration of CCA and management measures in local and national planning processes. Efficient and cost-effective CCA and DRM measures were also integrated into provincial and district planning and implementation processes. Further, it informed national planning processes, which helped to arrange budgets for such activities. The project also established an M&E and knowledge sharing system to update information related to climate change impacts and the results of the measures implemented. The following findings show the status or progress of activities in achieving the project's objectives.

42. Initially, the project was designed to target two Ramsar sites with 24 villages for livelihood activities. However, the target area was expanded to 89 villages for a broader landscape approach. This was done after recognizing the hydrological and ecological connections of several other wetland areas in the surrounding villages with the main Ramsar sites and catchment areas. Although the project target area enlarged, the budget remained the same. The livelihood activities were diversified but mostly remained small interventions (vegetable farming in a small area, ten chickens per household, hatchery for a group of farmers) and were not equally distributed to all villages. Moreover, the evaluation field consultations found evidence that some better-off households were provided with livelihood support while other poorer wetland-dependent households were excluded. This was due to poor monitoring on behalf of project management. Not all wetlands were demarcated. This was largely due to budget and time limits.

Evaluation question 7. What is the progress of implementation of project activities towards work plans?

Finding 7. Most of the project activities had been implemented by the time of the evaluation (see Appendix 4).

43. The project had a wide range of activities designed to support the local authorities and wetland communities. The goal was to better understand wetland management, climate change threats and conservation. It promoted viable diversification options for their livelihoods in order to improve both household income and food security. In addition, it helped to ensure that livelihood activities were placing less strain on the wetlands. The Evaluation Team concluded that most of the total planned activities were completed by the time of the in-country data collection phase in May 2022.¹ The CAWA project was implemented in four districts (Chomphone, Sonnabouli, Pathoumphone and Songkhone) of Savannakhet and Champasack Provinces, covering 89 target villages in and around the Ramsar sites and other wetlands. It implemented fishery conservation and management activities with feasibility studies and improved management regulations, and promulgated the management regulations of 16 villages in four districts (Chomphone, Songkhone, Sonnabouli and Pathoumphone). The project monitored the fishing activities of 18 fisherfolk in six villages of these districts. The project formed hatchery production groups in Ban Dadan, Ban Talao of the Chaphone District and Ban Bueng Chang of the Chonnabouli District. Farmers were provided with equipment for fish breeding and related trainings in Ban Kadan, Talao and Bueng Xang. Similarly, the project also held fish processing trainings for three households in three target districts. Ten households in Ban

¹ Reports show increased completion rates in the final months of the project.

- Lamthien and Sakhuntai were supported to raise snails. Planned livestock and veterinary management programmes were carried out. This included the establishment of poultry groups. It also strengthened the methods for raising, breeding, administering medication and bird hatching (chicken and duck) in 21 villages from three districts.
44. Villagers were also trained on veterinary medicine. Veterinary groups were established in 40 villages with 20 revolving funds of about LAK 2 740 000 (USD 185) in each village. A total of 6 363 households benefit from one or more form of such direct investment in CCA. A total of 2 096 wetland households benefited from one or more adaptive or livelihood practices (crop, fishery, aquaculture, livestock or irrigation). Six hundred households benefit from at least one non-agricultural off-farm livelihood support option. This includes activities related to ecotourism, handicrafts, NTFPs and value added wetland products. At least 2 501 men and women were trained by the project to apply climate change-resilient wetland management, agricultural practices and non-agricultural livelihood support options.
 45. The project trained a total of 170 people, including government staff and village heads on CCA planning. A total of 1 925.3 ha of habitats and nesting sites (crocodile and birds) have been protected. An area of 84.5 ha has been reforested with an emphasis on flooded forest and key wetland habitats across the Xe Champhone wetland landscape. *Mimosa pigra* (an invasive shrub) and water hyacinth (an invasive water weed) were cleared in 43.96 ha of wetlands to protect against the negative impact of these species and improve aquatic habitats.
 46. The project also completed a flood mapping for 83 villages of three districts in wetland areas at Good Kaenneua, Good Kaenneua Tai and Fitaloon water bodies, covering an area of 1 284.93 ha. Before building the weir at the Nongdern wetland, only two villages had used water from this wetland for rice fields (37.16 ha). After building the weir at this location, three villages with 48 households could use water from this source. The renovation and practice of closing the gates in November and December of each year saw the water level increase from 15 to 20 cm for the dry season. This helped dry season vegetable cultivation for 16 households from the Phoapha village and ten households from the Phakkha village. A total of 13 829 households benefited from improved fish consumption and sales from the 46 FCZs established by the project in Xe Champhone (12 117 households) and Beung Kiat Ngong (1 712 households). The project also mapped the FCZs. The wetland boundary marking was completed by the project sites. Water monitoring was also done. The project conducted awareness raising programmes of various types, including poster displays, trainings on the importance of wetland management and activities for school children. In partnership with the IUCN, a land use planning survey was conducted in six villages (Donyang, Phalaeng, Huamuang, Laohuakham, Dongphogkhun and Dongkhue) with 103 people (43 females) where village maps were created. The hydrological and water quality data collection programme included water level monitoring equipment installation at four points.
 47. A total of 46 FCZs were established. These, along with eight existing FCZs, were monitored, covering a total area of 590.16 ha (see Table 1). Study tours were also conducted in Bolikhamxay and Vientiane Provinces to provide knowledge on participatory fisheries management and fishery processing. The monitoring of fish catches was set up in four villages (Thongway, Phalai, Phapho and Kietnong) to understand changes in fish populations. The results indicated increases in fish catches compared to previous years, as

confirmed by fisherfolk community members. The project established a small-scale fish breeding facility in the Nongmak Ek village and supported fish breeding activities in the Phapho village.

48. In terms of animal-based livelihood support, the project trained selected villagers to establish a veterinary network in 12 villages. The veterinary training, equipment, medicine and revolving funds were provided to the participants of these veterinary networks. Villagers, mainly women, were provided with ten chickens, feed, equipment and support to construct cages in 12 target villages. The project also supported the production of fodder by forming grass planting groups with the provision of grass seeds (Israeli sweet grass and Neptune-grass) in 26 villages of the three project districts. The project also promoted the planting of two species of grass for cattle in 12 target villages. These grasses were also used to feed chickens and pigs by milling them and mixing with feed.

Table 1. Fish monitoring in Beung Kiat Ngong

Fish monitoring in the Beung Kiat Ngong wetlands		
Subject	From December 2019 to November 2020	From December 2020 to March 2022
Data point	3 461	7 858
Fish species caught	36	37
Weight of caught fish	6 052.12 kg	12 532 07 kg
Consumed at home	64%	67%
Sold	36%	33
Migrating species	30%	1%
Non-migrating species	70%	99%
Fish with eggs	0	8%
Fish without egg	100%	92%
Maximum length of fish	67 cm	59 cm

Source: FAO. 2022. FAO LAO project records.

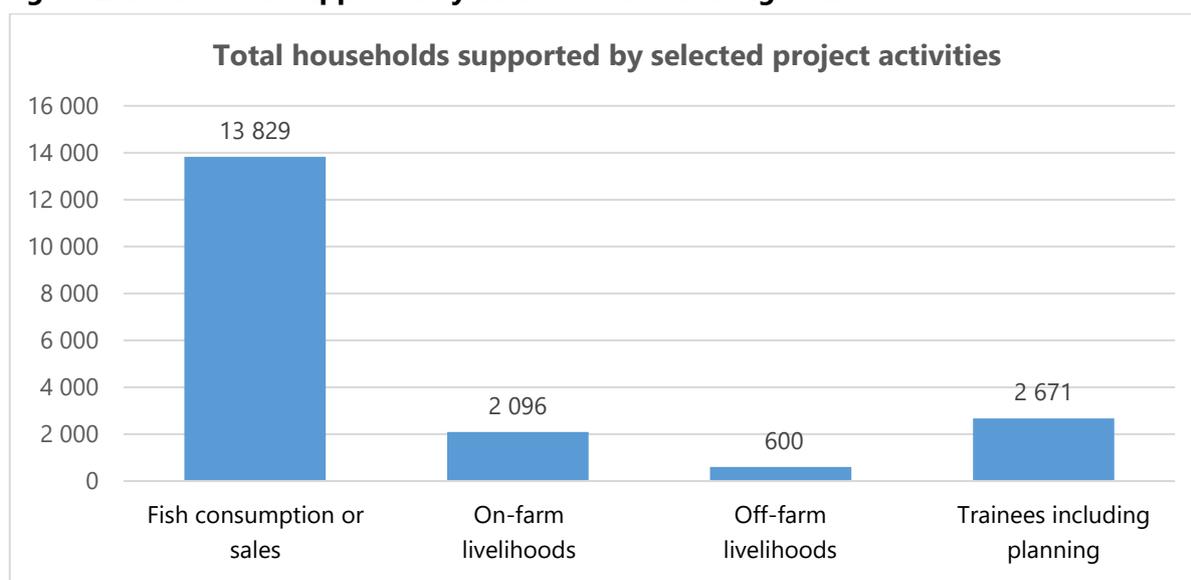
Table 2. Fish monitoring in Xe Champhone

Fish monitoring in the greater Xe Champhone wetlands			
Subject	From June to August 2018 and from November 2018 to February 2019	From March 2020 to February 2021	From December 2021 to April 2022
Data points	1 447	3 914	1 414
Fish species caught	100	139	130
Fish catch weight	2 053 kg	11 684.15 kg	3 177.41 kg
Migrating species	33%	13%	9%
Non-migrating species	67%	87%	91%
Had egg	0	34%	9%
Had no egg	100%	66%	91%
Maximum length of fish	62 cm	95 cm	78 cm

Source: FAO. 2022. FAO LAO project records.

49. The project conducted gender mainstreaming trainings for officials and community members through the LWU at all project sites.
50. Many programmes were completed, but some activities have yet to finish. Knowledge, attitude and practice (KAP) survey results, as well as responses to questions during the evaluation interviews, indicated consistent community and stakeholder views on more knowledge, increased income from both on- and off-farm livelihood activities and improved water management in the wetlands as a result of project support.
51. Figure 2 presents a summary of the direct support given by the project to households.

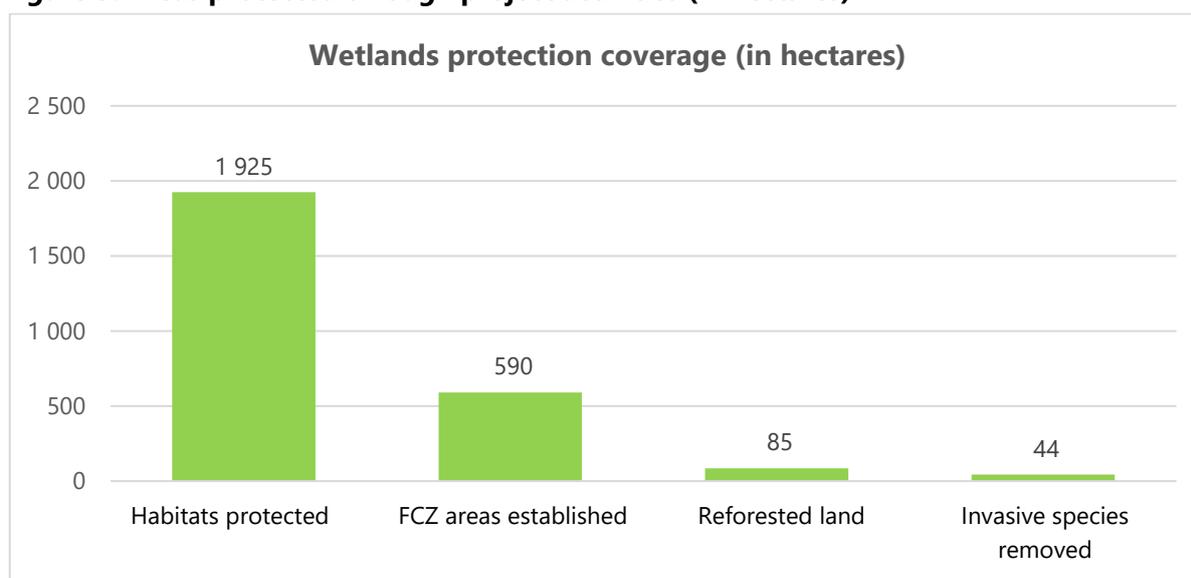
Figure 2. Households supported by livelihood and training activities



Source: FAO. 2022. Summarized by the Evaluation Team from Project Implementation Report.

Note: Off-farm includes ecotourism, NTFPs, handicrafts, wetland products and value added activities.

Figure 3. Areas protected through project activities (in hectares)



Source: FAO. 2022. Summarized by the Evaluation Team from Project Implementation Report.

52. The following activities were not completed by the time of the evaluation mission:
- i. a KAP survey of government officers and communities to assess their knowledge level after several training sessions and involvement in various activities;
 - ii. non-agriculture alternative livelihood programmes for 200 households;
 - iii. wetland review plans and follow up for approval;
 - iv. two more villages for ecotourism sites (develop tourism facilities);
 - v. replantation of 115.5 ha of riparian forest;
 - vi. a channel to relay early warning messages to villagers;
 - vii. a qualitative survey to analyse the effectiveness of national-level institutional coordination in support of CCA, a review of the methodological guidelines for the integration of CCA and DRM into local and national plans, activities to strengthen intersectoral coordination (change committee members to integrate new sectors into wetland management), and more knowledge sharing activities – of these, the mainstreaming of climate change into planning and budgeting exercises and the approval of the management plans are very important for the sustainability of project results; and
 - viii. continued lobbying with the Provincial Office of Natural Resources and Environment and the Provincial Office of Agriculture and Forestry to mainstream CCA into planning and budgeting activities.

Evaluation question 8. To what extent has the project achieved improved understanding among stakeholders on the risks of climate change and disaster mitigation of targeted wetlands?

Finding 8. Stakeholder involvement in various trainings and ground-level activities raised awareness among the implementing partners and communities on climate change risks and disaster mitigation.

53. To some extent, the project's implementing partners were already aware of climate change risks and disaster mitigation in the wetlands because they had been involved in several climate change-related projects and programmes in the past. This project, through training and ground-level activities, contributed to greater awareness among these partners. The May 2018 and 2019 KAP survey results concluded this. In fact, it found that 55 percent (weighted average) of villagers had stated that they are aware of climate change impacts and risks. During the evaluation's field consultations, there was a good level of understanding among stakeholders, especially grassroots partners and beneficiary groups, on the impacts of climate change, disasters and mitigation measures. The project supported awareness raising programmes through training sessions, field visits, environment day and wetland day programmes, and media communications. Better understanding could also be observed through the active participation of stakeholders in programme implementation, such as socioeconomic surveys, wetland demarcation and vulnerability assessments. This involved both the implementing agencies and the local communities. Greater awareness was also reflected through active participation in improving wetland management. At the district level, the integrated spatial plan of the Champhone District (final draft), the 2019–2023 Beung Kiat Ngong Ramsar Site Management Plan and the Xe Champhone Ramsar Site Management Plan saw the incorporation of 12 government partner activity plans for adaptation measures. There was a small example of the actual enforcement of protected areas. At a few wetland sites, "free riders" – those who keep fishing illegally – were arrested. They were warned against illegal fishing in the FCZ or at community ponds as if it were a first offence. They were also told that they would face fines if caught again.

Evaluation question 9. How do stakeholders experience project interventions with regard to their livelihoods and their living environment?

Finding 9. Community members and central and local government staff expressed that they benefited from the project interventions.

54. As noted, government agencies at the national, provincial and district level felt that this project helped to enhance their technical capacity by feeding into various district and wetland zone plans. Stakeholders cite this as evidence of capacity enhancement for their organizations. They also noted that the project had helped to address several of the knowledge gaps on climate change. It also met equipment needs and supported monitoring activities. These have been important improvements that enable the agencies to play their role in supporting the project.
55. Community members cited benefits from the livelihood programmes. This involved learnings on climate change, disasters and mitigation measures. This aspect also presented opportunities to set up alternative livelihood options and understand the importance of the wetlands, wetland management and the sustainable use of natural resources. Community members consulted in the field reported more income and improved food security through the project's livelihood activities. Household income went up from LAK 0.3 million to LAK 4 million (USD 20.3 to USD 270.3) on average, even though the level of increase depended on the type of support received by the household. Project sites expanded from 24 to 89, along with the number of benefiting households (see Finding 8). Activities, however, were overextended by this expansion. Households not engaged in selling chicken or other products mentioned a better household food situation and better nutritional value in their diet. They also mentioned that water management helped them to grow vegetables in the dry season. In fact, this activity has provided nutritional and income benefits. The protection of the FCZs safeguarded and increased local fish variety and density. These fish get washed into farmers' fields and ponds during the flood season. Farmers are allowed to catch these fish. In fact, the farmers mentioned that the number of catches and the variety has augmented since project intervention. This aspect also provides them with more food and income.

Evaluation question 10. Are there any barriers or other risks that may prevent future progress towards and the achievement of the project's longer-term objectives (long-term effectiveness)? What can be done to increase the likelihood of positive impacts from the project? To what extent can the progress towards long-term impacts be attributed to the project?

Finding 10. There are a few barriers that need to be addressed. If no arrangements are made, then the project results are at risk.

56. Technical experts were only available at the provincial level, not the district. In fact, the provincial government has to manage several districts and cannot support their limited technical staff in the community programmes of all districts. This shortage of technical staff at the district level could affect future technical support to the communities, which could then affect the results of this project in the long run. As mentioned, the project trained local communities on several technical aspects. Knowledge was transferred to the community level. To some extent, this could make the project results sustainable. However, further training for technical staff at the district level is needed to ensure achievement of the project's long-term objectives. One issue arising from a shortage of technical staff was in the Taleo, Dondeng and Kadan villages. Chickens died and veterinary volunteers trained by the project were not able to identify the disease since they had only been trained in

vaccination and some minor illnesses. The district agriculture department, then the provincial level agriculture department, was asked for assistance but no support was available due to limited staff and budget. The volunteer veterinarian also had problems reading the medicine descriptions since they were in English. Officials felt that villagers were not properly informed on routine vaccination in that they appeared to still have the mindset of treating their livestock only after they become sick. Relatedly, separate revolving funds were created for veterinary, fishery and livestock activities. Community skills in bookkeeping and managing funds, however, were poorly developed. As a result, this programme may not be able to contribute as planned.

57. The Ramsar site expansion plan has not been approved. Approval of this plan could help to secure appropriate levels of protection for the surrounding wetlands. The project developed management plans for the wetland areas, but they have yet to be approved by the government. Approval of these plans would likely be an important step towards protecting gains and enabling long-term positive impact in reducing environmental stress.

Evaluation question 11. Were there any unintended results?

Finding 11. COVID-19 created an environment for local products in the provincial and district markets.

58. Villagers used to buy fish fries at the Suvannakhet market in Thailand. However, imported fries became unavailable due to COVID-19 prevention measures and the closing of the Thai border. The fries produced by project-supported fish hatcheries received more of the market, and people from different villages started buying more from these hatcheries. The demand is far higher than the current production level, so farmers are planning to increase the production of fries by increasing hatchery ponds at their own cost. This commitment is an indication of an unexpected yet viable local market opportunity. Project reports for government officials cited this as an unanticipated benefit from the lockdown for the rural economy.

Evaluation question 12. Is there any evidence of environmental stress reduction and environmental status change?

Finding 12. There were initial signs of environmental stress reduction, and some development plans incorporated climate change and wetland management issues.

59. The construction and improvement of dykes helped to store more water for the dry season. This helped wetland biodiversity. It also provided water to the farmers for agricultural use, which improved the adaptive capacity of the wetlands. The weir at Nongdern enabled a water increase by almost 100 percent for agricultural use, rising from 37.16 ha to 73.47 ha (see Evaluation question 7). The demarcation of wetland areas helped to stop encroachment. The designation of the FCZs helped to conserve native fish species. In fact, there was an increase in native fish populations in the FCZs and more fish for local consumption (see Tables 1 and 2). The project's livelihood activities helped to increase household income and food for household consumption. Logically, this makes a small contribution to overall community resilience against future shocks. In addition to the households supported (see Figures 2 and 3), the project established community management committees and plans for the protection of wetlands. This also aimed to build knowledge base committees on climate change impacts and risks and wetland management needs. Ramsar management plans were developed. Some district plans

incorporated climate change and wetland management issues. Many government plans included wetland management and climate change issues into their plans (see Finding 9).

Evaluation question 13. To what extent can the attainment results be attributed to the GEF-funded component?

Finding 13. Results are attributed to the GEF-funded components. The government and communities made in-kind contributions.

60. The GEF fund supported all activities. This made a valuable contribution to the progress. Government agencies made in-kind contributions (see Evaluation questions 30 and 31). The communities contributed their time and labour. Other service providers, such as the IUCN and Tétraktys, brought specific expertise. Aside from direct activities, the project played a key role in raising awareness among government officers and community members on climate variability and change-induced threats. This attainment contributes to the achievement of the GEF climate change outcomes. Component 1, with the GEF Objective CCA-2 Outcome 2.1, aimed at increased knowledge alongside improved and diversified livelihoods. It did so through livelihood support programmes to reduce vulnerability to climate change. The project trained provincial and district officers to influence planning so that CCA could be mainstreamed into development planning. This contributes to the attainment of the GEF Objective CCA-1 Outcome 1.1 of mainstreaming adaptation in broader development frameworks at the country level and in targeted vulnerable areas.

Evaluation question 14. To what extent may the progress towards long-term impact be attributed to the project?

Finding 14. The project made progress in key areas which, if sustained, may contribute to long-term impact.

61. The project intended to avoid climate change vulnerability so that wetland biodiversity could be secured for the communities that are dependent on them. Initiatives such as the construction and improvement of dykes and dams will contribute to the sufficient storage of water for dry seasons. This helps to protect wetland biodiversity and ecosystems, and support agricultural practices in the dry season. The survey and demarcation of wetlands helps to protect these sites from encroachment. The identification of the FCZs and protective measures arranged by community management should help the long-term conservation of local fish species. This protects local fish species from overfishing and extinction. These are good practices that are affordable and replicable for similar contexts. Underpinning all of this was an investment in awareness raising and the provision of knowledge among community members and government officers on climate change impacts and risks. Greater awareness, the undertaken safeguard measures and community motivation from livelihood gains should maintain the commitment to wetlands protection in these areas (see 4.4 Sustainability).

Evaluation rating for effectiveness: Satisfactory

4.3 Efficiency

Evaluation question 15. To what extent was the programme implemented efficiently and cost effectively?

Evaluation question 16. To what extent did the programme implementation mechanism contribute to efficient implementation of the main project outputs?

Findings 15 and 16. Project implementation was cost-effective, except for management. A delay in project activities at the beginning made the project unable to meet the final targets.

62. The project accomplished many activities in a very short amount of time, with a few left to complete (see 4.2 Effectiveness). It spent USD 8 046 000 by 30 April 2022, accounting for 94.4 percent of the total GEF grant. The remaining 5.6 percent of the grant is sufficient to complete the remaining activities. Project activities were delayed because procurement and activities related to the project's start (office setup, hiring of staff, etc.) were delayed. The project started in 2016, but the implementation of most of the activities started in 2019. This was due to a long approval process at the Ministry and the delayed disbursement of money to implement the project in the provinces and districts. It was also affected by COVID-19. The floods in 2020 further delayed some activities in the villages. Structural changes and staff turnover in the ministries affected project activities. The initial agreement was with just the Ministry of Natural Resources and Environment. Later, a decision was made to sign contracts with the provincial and district offices of both the Ministry of Natural Resources and Environment and the Ministry of Agriculture and Forestry in order to transfer funds directly to the target areas and to accelerate the implementation process. Efficiency in the implementation process improved after these changes. The adopted participatory approaches are acknowledged as an important part of accomplishing many activities in a short amount of time.
63. The project established management committees in the local communities and provided activity trainings. This arrangement made the implementation processes more efficient.
64. In terms of decision-making on activities, choices such as vegetable species and livestock for the alternative livelihood programmes were appropriate for the local context (weather, community preferences, etc.). Limited practical sessions for veterinary training meant that the village veterinary volunteer had difficulties in carrying out a full range of tasks.
65. Overall, the project's management costs were very high (around 50 percent). The project had to pay FAO overhead, implementation costs for partner agencies and administration costs for all implementing partners.

Evaluation question 17. Has the agreement with the implementing partners been applied efficiently?

Finding 17. The agreement with the implementing partners was applied with some changes to the approach.

66. As noted, the original agreement with the Ministry of Natural Resources and Environment and the Ministry of Agriculture and Forestry as the main implementing partners was changed to allow for a better channelling of resources at the local level.
67. Other partner contributions were not as fully realized as anticipated in the project design. According to the project documents – the IUCN, the International Water Management Institute, the KfW Development Bank and the World Bank – were expected to contribute to

the project. The IUCN was involved in various studies related to wetlands and the preparation of wetland management plans. The organization, however, was funded by the CAWA project to perform some of these activities, making them service providers rather than purely co-financers. FAO provided administrative support for procurement and monitoring activities and coordination with various institutions. Some partner projects were completed before the initiation of the CAWA project or, in some cases, still had ongoing projects. This made it challenging to obtain precise information on their contributions. However, some USD 8.77 million was contributed by other organizations (see Appendix 5).

Evaluation question 18. Has project management been able to adapt to any changing conditions to improve the efficiency of programme implementation?

Finding 18. The project modified its implementation strategy to adapt to the structural changes of the Ministry. There is some evidence of changes based on the findings.

68. The project distributed high quality breed chicken varieties at the local level. However, such varieties have weaknesses to local diseases and are costly to raise. Learning this made the project move to local chicken breeds. The LOAs with the provincial and district offices of the Ministry of Natural Resources and Environment and the Ministry of Agriculture and Forestry divided roles according to the needs and abilities of each partner. This arrangement improved efficiency and enhanced the role of provincial and district offices in providing services to the targeted communities. The few dams constructed could not store sufficient water for the dry season, so they were made higher. These design changes improved the water supply for those locations.
69. Covering more villages – from 24 to 89 – stretched resources very thin (see Evaluation question 9). However, the rationale for this expansion was sound based on many important wetland sites that had been excluded. In fact, these previously excluded sites are ecologically linked to the Ramsar sites. There was also the need to consider the wetland needs in a more holistic way.
70. Monitoring from the PMU needed improvement. Indeed, this aspect affected the efficiency of project implementation. The PMU relied on reporting from the field and was not able to verify the performance and quality of the work to a sufficient extent on the ground. There were issues with some activities that had not been completed and did not seem to be fully recognized and corrected (see Appendix 4).

Evaluation rating for efficiency: Moderately Satisfactory

4.4 Sustainability

Evaluation question 19. Are there any barriers or other risks that may prevent future progress towards the achievement of the project's outcomes and objectives?

Finding 19. There are some risks that could prevent future progress and the achievement of the project's outcomes.

71. Rice cultivation is a priority for the Government of the Lao People's Democratic Republic. Indeed, the project sites are very important rice production sites for the country. Increased production is only possible by expanding agricultural lands, and this brings encroachment risks to the wetlands. Chemical fertilizer and pesticide use in rice fields will undoubtedly affect wetland biodiversity if this goes unchecked. There is a considerable challenge in having the government realize the economic value of wetland conservation and how the

long-term value of conservation-friendly wetland production does not need to be mutually exclusive to national rice production demands. The project has sites that include many other wetlands around the current Ramsar sites. These surrounding sites, which are proposed for enlargement, are ecologically very important to maintain biodiversity and the hydrological processes of the Ramsar sites. If the expansion plans are not approved due to differing government interests, then this could affect the two Ramsar sites. The project had some success in demarcating certain wetlands outside of the Ramsar sites – but not all. These remain vulnerable to pressures for rice production.

72. The project trained staff from relevant government institutions to mainstream climate change impacts and risks into planning processes. However, changes in the country's political situation, especially a new government, mean that key staff will likely be subject to reshuffling and turnover. This will affect the planning process of these institutions and result in a loss of institutional memory to continue progress and maintain ownership of the project. Individual ministerial and provincial officers consulted by the Evaluation Team stated that they will continue monitoring the results and carrying out these activities, but the government has a limited budget to support them in doing so. Government staff mentioned that they would like to seek out other funding opportunities to continue the project, but it is difficult to ensure that their proposals would be approved.
73. In a few areas of two provinces, namely the Phathoumphone District, some individuals continue to illegally fish and log (see Evaluation question 8). This issue will need further community-level monitoring so that such practices can be kept under control and do not pose threats to future protection efforts – especially if there is a downturn in the local economy or crises that affect livelihoods. In fact, such pressures make people turn to illegal practices.

Evaluation question 20. What is the likelihood that the project results can be sustained after the end of the project?

Evaluation question 21. What are the key risks that may affect the sustainability of project results and its benefits (financial, socioeconomic, institutional and governance, and environmental aspects), as well as risks identified in the project document?

Findings 20 and 21. Sustainability of the project results and benefits will likely go beyond the project's lifespan if the potential risks are recognized and managed.

74. As underscored, the project trained government staff and community members in a range of activities. These activities were designed to increase understanding and commitment among stakeholders in terms of wetland protection and livelihood diversification. The project also aimed to develop practical skills. This knowledge should form a useful basis for continuing progress beyond the project's lifespan. A climate change vulnerability assessment tool and process was developed, tested and validated. Several district development plans and Ramsar management plans were drafted, and many government plans and programmes incorporated both climate change and wetland management (see Appendix 4, Output 2.1). Hence, institutional sustainability has some strong building blocks for the future. As noted, government officers mentioned that they would be interested in making further progress if it were not for the limited budget. One key issue affecting long-term progress and the safeguarding of what has been achieved is the national government's commitment to concrete planning and resourcing for wetland protection. Above all, perhaps the tension between the promotion of sustainable, environment-friendly

practices and rice production needs should be successfully managed. The long-term financial sustainability of wetland protection seems closely related to this.

75. The project's work on knowledge and evidence bases provides another set of contributions for decision makers and policy developers. This includes: various studies; land use maps; flood maps; technical papers; surveyed wetland areas; socioeconomic and biological information on wetland areas; proposals for the expansion of Ramsar sites; and management plans for wetland management. This will continue providing supervision to the Ramsar sites and the surrounding wetlands (those in the expansion plan) since the project established a steering committee for them.

Evaluation question 22. Have any project results, lessons or experiences been replicated (in different geographic areas) or scaled up (in the same geographic area, but on a much larger scale and funded by other sources)? What results, lessons or experiences are likely to be replicated or scaled up in the near future?

Finding 22. Similar activities are being implemented in other wetland areas. Sharing lessons from this project with these activities will be helpful in the future.

76. There are a few examples of similar projects being implemented by other organizations. These, however, have yet to replicate good practices. The Ministry of Natural Resources and Environment noted that they are interested in carrying out some of these activities in the future and would be keen to approach other donors for support in replicating good practices from this project. A Chief Technical Adviser from the United Nations Environment Programme was interested in learning from the project's lessons since the organization may implement similar projects in other wetland areas of the country. FAO has another GEF project with activities to establish early warning systems from the central to the village level. These early warning activities, including the measurement of water levels and meteorological trends, could be useful for incorporation within a future CAWA-type project.

Evaluation question 23. Has the project established sustainable institutional arrangements or cross-sector partnerships?

Finding 23. The project established sustainable institutional arrangements and cross-sector partnerships.

77. The project was implemented jointly by the Ministry of Natural Resources and Environment and the Ministry of Agriculture and Forestry. According to stakeholders, it created a suitable environment to bring these two institutions closer. The LWU was also involved in this cross-sector partnership. Further, the project supported the establishment of a Ramsar steering committee at provincial and national levels where these different agencies are involved. This should encourage the continuation of cross-sector partnerships and cross-sector cooperation for wetland-focused initiatives. The project supported the establishment of community groups, the development of management plans, and the provision of training on livelihood and wetland management. There appeared to be a healthy level of ownership at the community level alongside tangible livelihood gains to motivate participants. There is some anecdotal evidence from the evaluation visit that households involved in the project support other households in starting these livelihood activities. One example is chicken farmers providing stock to others.

Evaluation question 24. Has the project developed an exit strategy or is planning to develop one?

Finding 24. The project has not developed and exit strategy but plans to do so by project closure.

78. The project still needs to complete some of its activities and has not started working on an exit strategy. The project team noted that they will develop an exit strategy before the end of the project. This would consider arrangements for the sustainability of project progress.

Evaluation rating for sustainability: Moderately Likely

4.5 Factors affecting progress

4.5.1 Financial management and co-financing

Evaluation question 25. Is the co-financing being made available to the project as planned to contribute to meeting project outputs, outcomes and objectives?

Evaluation question 26. What have been the financial-management challenges of the project? To what extent has pledged co-financing been delivered? Has any additional leveraged co-financing been provided since implementation?

Findings 25 and 26. Co-financing was not made available to the project as planned. The committed amount against the amount received by midterm is provided in Appendix 5 (see also Findings 17 and 18).

79. The co-financing level was not made available to the project as planned. According to the project document, the GEF contribution to the project was USD 4.7 million, and USD 15.4 million was anticipated in co-financing from other partners, such as FAO, the IUCN, the International Water Management Institute, the KfW Development Bank, the World Bank and government agencies like the Ministry of Natural Resources and Environment and the Ministry of Agriculture and Forestry. By the time of the terminal evaluation, the GEF made all committed money available, and there was in-kind support from the Ministry of Natural Resources and Environment, the Ministry of Agriculture and Forestry and the LWU through its provincial and district office facilities (actual figures were not available). The government's in-kind contribution as per the project document was USD 1 000 000. This in-kind support included staff salaries, project offices and utilities. Contributions from others did not materialize as expected (see Evaluation question 20). FAO committed USD 750 000 of co-financing to this project and provided administrative support for procurement and monitoring activities, as well as coordination with various institutions. Based on updated figures from the 2022 PIR, a total of USD 8.77 million was contributed in co-financing as of late 2022. There was a reasonable expectation that this would rise to USD 9.27 million by the end of the project.

4.5.2 Project execution

Evaluation question 27. Has a communications and dissemination strategy been developed and implemented?

Finding 27. A communications plan was developed and implemented but needs work to reach a wider audience.

80. The project developed a communications and dissemination strategy and implemented it. The communications strategy was developed to help track the achievement of project activities and facilitate M&E. This activity was part of Component 4 of the new results framework and focused on managing, reporting and disseminating knowledge generated

by the project. It also aimed to develop a communications approach for better engagement with key stakeholders and general audiences. Related to this, the project hired a knowledge management and participation expert to develop and implement a knowledge management strategy. The knowledge management strategy was updated annually. The information on project activities was collected and reviewed. Knowledge products were developed and included: strategic plans; progress reports; technical reports; guidelines; newsletters; information, education and communication materials; maps; and data sets. These were intended to develop timelines and a bibliography of the project's knowledge materials and information that would be updated, published and shared with wider audiences through various means. In accordance with FAO guidelines, the project webpage was located within the corporate FAO website and data portal (FAO, 2018). The project also organized knowledge sharing workshops in coordination with the GEF-funded FAO Strengthening Agroclimatic Monitoring and Information System project to increase awareness and disseminate good practices and lessons learned from CCA activities.

81. The communications plan included activities for knowledge sharing events. This aimed to showcase lessons learned from the CAWA project with key partners and the general public. It also involved participation in important events and workshops to further present the project, for example, on World Wetlands Day and World Environment Day. Project brochures, education materials and posters were developed and used at these events. The project also utilized seminars and workshops at national, provincial and district levels to share information and lessons from the project. Social media like WhatsApp groups and electronic and print media were used to disseminate information related to the project activities. Information on the project was also shared through FAO and the Ministry of Natural Resources and Environment websites in 2023. At the local level, communities viewed awareness generation among villagers as helpful in internalizing the learnings from their involvement in the project. The PMU noted that such awareness activities made the implementation process easier.
82. The project launched a mascot: Uncle CAWA. This initiative aimed to raise awareness and provide knowledge on wetlands and its conservation in the country. Project field staff, government counterparts and village representatives were trained on citizen journalism. They created videos and reported information through mobile phones – much of which circulated on Lao National Television and other news channels, such as Lao Star (Lao Star TV, 2020a; 2020b).
83. The audience reported good feedback on these programmes.
84. The project also developed eight videos (FAO, 2023d) and made several press releases on project information. It also developed a CAWA mobile application to make it easier for people to watch videos, tutorials and download reports on project activities, lessons and knowledge. Later, however, mobile application development was discontinued because it took a lot of time and the communications consultant had to focus on video production and producing materials on lessons learned. Regardless, project lessons and awareness generation need to be disseminated among wider audiences. Perhaps FAO networks could be used to reach wider audiences. More awareness programmes need to be implemented at the community level so that all wetland communities are covered.

Evaluation question 28. To what extent has the project built on synergies and complementarities with other wetland or agriculture projects, partnerships, etc., and avoided duplication of similar activities by other groups and initiatives?

Finding 28. The project could not directly build on synergies and complementarities with any other projects in the wetlands.

85. No formal arrangement was made to exploit potential synergies with other similar projects. At an earlier stage, there was a plan to establish synergies with projects from the World Bank, the IUCN, the KfW Development Bank and the International Water Management Institute so that CAWA could complement or supplement activities in the targeted wetland areas and avoid any overlap in the villages. However, most of these projects had ended before CAWA started. The CAWA project was implemented through provincial and district bodies of the Ministry of Natural Resources and Environment and the Ministry of Agriculture and Forestry. The other projects were also implemented through the same institutions. The CAWA project involved trainers from these agencies who had been involved in previous projects. Lessons from previous projects may have influenced this project. The lessons from various fisheries and agriculture projects of the past were also linked to this project through these agencies. The KfW Development Bank funds a project in Beung Kiat Ngong with objectives that are similar to CAWA. Strong coordination is needed to avoid duplication or overlap.

Evaluation question 29. How do the various stakeholders see their own engagement with the project?

Finding 29. The various stakeholders were satisfied by their engagement with the project.

86. The various stakeholders involved expressed satisfaction in being part of this project and are willing to contribute more in the future. Community members spoke about the value of wetland conservation and what they learned about better ways of generating more benefits from the wetlands. They also noted that the livelihood activities improved their household economy and food quality. They expressed their satisfaction from these project activities and confirmed that they will continue them beyond the project's lifespan. The provincial, district and village authorities requested to expand these activities so that they can train more wetland villagers and maintain activities. Community members had positive views on their participation in wetland demarcation, wetland management, FCZ protection and various livelihood activities. The NGOs involved in the project were also interested in similar, future initiatives. Provincial and district government staff noted key project contributions that had addressed many of their concerns, such as institutional capacity and improved monitoring of the wetlands. They also highlighted that the project had moved several of their intended activities forward: the Ramsar site studies; the demarcation of wetland zones; the implementation of livelihood activities to decrease negative pressure on the wetlands; and the development of the management and expansion plan of the Ramsar sites. They expressed that they would not have been able to advance this work without project support. Budget constraints were the hindering factor in this.

Evaluation question 30. Were local actors – civil society or private sector – involved in project design or implementation and what was the effect on project results?

Finding 30. Community members and relevant international and local NGOs were involved in project design and implementation.

87. Project design involved a wide range of stakeholders, including NGOs, civil society organizations and community members. However, there was no involvement of the private

sector in project design or implementation. One NGO, the IUCN, was involved in project implementation as per their relevant expertise. The NGO, Tétrakty, brought ecotourism promotion ideas to the design process. Appropriate activities were identified to advance the agenda. The IUCN also identified various risks and proposed appropriate mitigation measures. Its involvement also contributed to the implementation of activities.

Evaluation question 31. Is the project on track as it was originally designed or have there been delays in the project approval, implementation and reporting process? What are the major reasons for the delay?

Evaluation question 32. To what extent did the executing agency effectively discharge its role and responsibilities in managing and administering the project?

Findings 31 and 32. The project is on track, but the implementation of some activities was behind schedule.

88. See Evaluation question 44 for commentary on these questions.

Evaluation question 33. How well is the PMU functioning?

Evaluation question 34. Are there sufficient human resources, financial resources, etc. for the PMU operation, and does it have the capacity to support project implementation?

Evaluation question 35. What have been the main challenges in terms of the project management administration?

Findings 33, 34 and 35. Despite COVID-19 restrictions, the PMU functioned well. Procurement was slow due to FAO regulations.

89. The project was implemented in close cooperation with government departments. Despite slow processes within the Ministry of Natural Resources and Environment and FAO's long procurement process, the PMU could advance the work. After a change in modality, the PMU decided to make LOAs directly with the provincial and district offices of the Ministry of Natural Resources and Environment. This improved the implementation process. The PMU, with the Chief Technical Adviser and nine experienced team members (two from operations and administration, three senior technical staff, three field officers and one driver), provided support to the project and its partners. There were continuous challenges of timely procurement, contract management and technical support for the project's large network of LOA partners under FAO regulations and procedures. There was also a tendency for inflexible approaches that were inappropriate for small-scale community initiatives and local delivery. During the COVID-19 lockdown, CAWA's technical support for field partners stalled with its entire team and field officers based at home. The project's budget expenditure dropped close to zero. All previous project management problems involving the timeliness of procurement and contract management under FAO procedures became more intense as CAWA and FAO staff began to work remotely. This greatly extended the time needed for each management task. In fact, there was little evidence of time saved due to COVID-19 or flexibility from FAO to accelerate working procedures. As a result, the efforts for the procurement of CAWA materials spanned from June to November 2021 with very little delivery. Further, the impact of COVID-19 on partner field delivery necessitated the implementation of ten LOA extensions (amendments). This dominated the staff's focus and time in the last few months of 2021. Some incomplete activities were also reported as complete in the PIR, and project management was not able to verify and correct them.

Evaluation question 36. How well have risks been identified and managed?

Finding 36. Risks were identified and mitigation measures were provisioned.

90. The project analysed potential risks during project design and proposed mitigation measures. Risks were monitored every year with an updated mitigation status. The mitigation measures were effectively applied during project implementation. The project could then recognize and avoid risks. It also produced the required reports, which were provided to the project steering committee on a regular basis.

4.5.3 Project implementation and oversight

Evaluation question 37. To what extent has FAO delivered oversight, supervision and backstopping (technical, administrative and operational) during the project identification, formulation, approval, launch and execution? What kind of support or changes are expected from FAO by the execution partners?

Finding 37. FAO delivered a good level of oversight, supervision and backstopping.

91. FAO has extensive experience in fisheries and agriculture. Its support to this project was relevant, and its comparative advantage was considered during project development. Stakeholders considered that the project benefited from FAO's expertise in developing methodologies and practices and providing technical assistance and capacity building in the sustainable management of fishery and agriculture resources. Gaps in both the Ministry of Natural Resources and Environment and the Ministry of Agriculture and Forestry were assessed in the beginning of project design. Enhancement programmes were designed and carried out based on that capacity. FAO already had insight and analysis on fisheries and agriculture from its past involvement in these sectors in the Lao People's Democratic Republic.
92. As the financial and operational executing agency, FAO provided procurement and financial management services for project resources. FAO supervision was accomplished through standard procedures and undertaken competently. However, lengthy processes involved in FAO procurement, compounded with COVID-19 restrictions, delayed procurement and slowed down some of the activities. FAO procurement rules did not allow for the use of local suppliers and simple materials (cement, bricks, stones, sand and basic agriculture inputs). As a result, FAO procurement rules took time and increased transport and supply costs. The procurement process also required online replies from suppliers to a centralized computerized system at FAO headquarters. Each round of bids took at least three weeks, even for just a few supplier replies. The provincial and district suppliers were not accustomed to bidding through computerized systems and encountered language barriers since the process is in English. They were either uninterested or unable to make bids or submit documents through this centralized procurement system.
93. FAO supervised and provided technical guidance for overall project implementation. The administration of the GEF grants adhered to FAO rules and procedures and was in accordance with the agreement between FAO and the GEF. The FAO team was involved in project implementation monitoring based on the project document, approved work plans, budgets, progress and performance reviews against the work plans, and tracking tools. FAO support focused on achieving targeted results. The support was appropriate and adequate, except for contract management and technical guidance on the project's large network of LOA partners under FAO regulations and procedures. There was a tendency towards inflexible approaches that were inappropriate for small-scale community and local delivery.

4.5.4 Knowledge management, awareness raising and communications

Evaluation question 38. How effective has the project been in communicating and promoting its key messages and results to partners, stakeholders and a general audience?

94. Various observations on knowledge management contributions are provided in this report (see 4.2 Effectiveness, 4.4 Sustainability and Evaluation question 33).

4.5.5 Design and monitoring and evaluation

Evaluation question 39. To what extent is the project's results framework/logframe (i.e. TOC, intervention logic, indicators, etc.) appropriate to reach the project's goal and objectives?

Evaluation question 40. Is the project design suited to delivering the expected outcomes?

Evaluation question 41. Is the project's casual logic coherent and clear?

Evaluation question 42. To what extent are the project's objectives and components clear, practical and feasible within the time frame allowed?

Findings 39, 40, 41 and 42. The results framework has clear objectives, components, outcomes and outputs. The project design was appropriate for delivering the expected outcomes. The TOC was not clear in the project document.

95. The TOC was briefly presented in the project document and later modified with more livelihood activities and monitoring arrangements. The concept and strategy with which the project was developed was appropriate to reach the proposed goal and objectives. It also addressed the shortcomings in both livelihood alternatives and wetland management. The activities from the project design created an environment for the sustainable management of wetlands for economic and ecological benefits. They also addressed the impact of climate change. The objective, components, activities and overall logic of the project were basically coherent and clear to deliver the expected outcomes. The Evaluation Team found the design to be understandable, verifiable, testable, plausible and inclusive. The results framework was appropriate with clear outputs, outcomes and activities to address wetland and livelihood-related issues and achieve the objective. However, the indicators were not clear, and there was no baseline for most of the activities. The inception workshop did not lead to any changes to the activities or targets of the results framework. However, in 2019, changes were made towards creating a broader landscape conservation approach. It was then that the number of villages increased from 24 to 89 to include more important wetlands and add more livelihood and ecotourism activities. Regardless, the overall number of target households for the livelihood programme did not change and the target indicators remained the same. The final evaluation used the indicators and targets of the results framework to evaluate the project's progress.

Evaluation question 43. Is the project's M&E plan and system in place?

Evaluation question 44. Is the project's M&E system practical and sufficient? How has stakeholder engagement and gender assessment been integrated into the M&E system?

Evaluation question 45. Was the project M&E system operating as per the M&E plan? Has information been gathered in a systematic manner, using appropriate methodologies?

Findings 43, 44 and 45. The M&E plan was not in place in the project document but was added later. Monitoring was carried out with the help of the provincial and district project coordinators who reported to the provincial and district offices of the Ministry of Natural Resources and

Environment and, from there, to the CAWA project office and the national Ministry of Natural Resources and Environment. The mid-term review was conducted under COVID-19 constraints. Except for this restriction period, the project M&E system had been operating according to plan. It was, however, weak in verifying reported achievements on the ground and being able to correct these where necessary.

96. Initially, there was no Component 4, which dealt with establishing an M&E system and knowledge management. The project established an M&E database and assigned an officer to manage it. However, as noted, the project design did not provide appropriate indicators for monitoring, and the project never established a baseline for most indicators. The M&E system was later established in 2017. The monitoring was not done accordingly until the mid-term review recommendations, which followed the M&E system on a regular basis. The monitoring was done at the provincial and district levels by project facilitators and coordinators from the District Office of Natural Resources and Environment. They reported to the Provincial Office of Natural Resources and Environment, which then reported to the Ministry of Agriculture and Forestry and the CAWA project office. As underscored, COVID-19 impacted the monitoring of field activities in 2020 and 2021. There were less monitoring visits from the CAWA office in Vientiane. As a result, some information in the PIRs did not match what was happening on the ground. Due to limited opportunities to conduct in-person visits, the management was not able to identify such issues and correct them (see Appendix 4). The PIRs and biannual reports were submitted regularly to the GEF Coordination Unit. In addition, the project shared its lessons learned and raised awareness on the climate change aspects of wetland management through a range of platforms and meetings at the national, province and district level.

97. The output targets were realistic compared to the budget and time frame. However, more target villages meant that the activities and budget allocations were insufficient in meeting the needs in the expanded areas. Monitoring also assessed gender aspects as per the M&E plan. FAO had the responsibility of monitoring progress against the work plan, as well as financial monitoring. The progress monitoring was done through biannual and annual reporting to FAO. The annual work plans were developed at the end of each year with inputs from the project staff. The major findings and observations of all biannual reports were provided in an annual report covering the period from June to July, the PIRs and the PPRs. This was also submitted by the project team to FAO for review and comments, followed by a final submission to the GEF. All reports were presented to the project steering committee members. This way, the key national government partners were kept abreast of the project's implementation progress. The project produced and submitted 80 technical reports, five annual work plans, six PPRs (one in draft form) and five PIRs. Similarly, six biannual financial reports and project steering committee minutes were also submitted. The project team's provincial- and district-based field coordinator visited sites on a regular basis to monitor implementation and progress, except during the COVID-19 restrictions on mobility. The findings contributed to a better informed sustainable management of the Ramsar sites and other surrounding wetlands that have global significance. Fish population monitoring was not done according to standard research procedures. The sample size (sampling points) varied each year and season. With such findings, it was not possible to confirm the impact of the project interventions (see Tables 1 and 2).

Evaluation rating for factors affecting performance: Moderately Satisfactory

4.6 Cross-cutting issues

Evaluation question 46. To what extent were gender considerations and human rights reflected in the project design?

Evaluation question 47. To what extent were gender considerations (equality) taken into account in designing and implementing the project? Has the project been designed and implemented in a manner that ensures gender-equitable participation and benefits? Was a gender analysis done? How was gender in decision-making?

Findings 46 and 47. Gender equality was considered and reflected in the project design. A gender action plan was developed.

98. In line with the GEF Policy on Gender Mainstreaming (GEF, 2012) and the GEF-6 approach on gender mainstreaming and women's empowerment (GEF, 2013), gender considerations were important in this project. The project formulation included a gender analysis and strategy (Annex 8 of the project document) with an assessment of the project's gender considerations, implications and strategy based on activities and outputs in 2015. The project execution acknowledged gender importance and conducted a village gender assessment in the Xe Champhone wetlands (not in Beung Kiat Ngong) in 2017. The information generated by this assessment (also validated in Annex 8 of the project document) outlines: i) poverty in small populations, with poor women lacking social capital, livelihood assets, and access to knowledge and skills; ii) unequal power relations present in the wider community and the local government structure; iii) a lack of access to information that could strengthen the capacity of women; and iv) the prevailing perception that "technical matters" like wetland and resource management is for males only. Further analysis was conducted through the IUCN's vulnerability assessment findings from Xe Champhone and Beung Kiat Ngong. This fed into the December 2017 IUCN Gender Mainstreaming Framework and Strategy report for both sites. The report included a TOC as a framework to design gender mainstreaming actions and to provide strategic considerations for mainstreaming gender into the project outputs.
99. Although the project's field activities prioritized women's groups and equal representation among women and men, this aspect was not fully achieved. In 2019, an internal review of both the results and the M&E framework further proposed the integration of gender-specific indicators and the FAO gender marker system to highlight project achievements related to gender objectives. Again in 2019, M&E gender data were further elaborated through the design of an LOA with monitoring and quarterly progress reporting procedures. This aimed to provide gender-disaggregated data on all project activities of a new network of ten subnational and national partners. These provisions strengthened performance monitoring with the inclusion of women in policy, planning and implementation processes. Gender-sensitive planning, implementation, capacity development and monitoring was included in the design of the project activities. The team of knowledge management and participation experts included a gender expert from 2016 to 2019. The project also engaged with the LWU at the national and local level for assistance on a gender strategy review and to supervise the partner's gender mainstreaming activities. This further ensured effective gender mainstreaming in the field. The revised 2020 strategy for the decentralized local, provincial and district LWU offices focused on: conducting a gender strategy evaluation; gender mainstreaming trainings; women's livelihood improvement (handicrafts); the identification of gender focal points; and the supervision of partners' gender mainstreaming implementation in the field. In addition, the project

established several women's groups (committees) and included a good number of women in other community groups with a few led by women. This helped to provide decision-making opportunities for women.

4.6.1 Environmental and social issues

Evaluation question 48. To what extent were environmental and social concerns taken into consideration in the design and implementation of the project? Has the project been implemented in a manner that ensures the ESS mitigation plan (if one exists) has been adhered to?

Finding 48. Environmental and social concerns were considered during project design and implementation.

100. The project aimed to improve the understanding and capacity of the communities and relevant government agencies considering the economic importance of the wetlands and its environmental fragility. The focus was on adopting appropriate adaptation strategies so that environmental and social (and economic) needs are balanced. The project was implemented in a manner that ensured the development of the ESS mitigation plan. It adhered to this throughout. The project analysed threats and barriers that obstruct improved wetland management for multiple conservation benefits of environmental and human needs. The project made efforts to tackle these threats by addressing three key barriers, namely: i) gaps in knowledge on and the understanding of climate change impacts and the complex and interrelated nature of vulnerabilities to climate change and natural disasters; ii) gaps in knowledge on and experience in the development and implementation of specific CCA measures; and iii) long-term CCA-specific integrated evidence-based planning. Communities were involved in the implementation of all activities. This helped to ensure that the environmental and social concerns identified by them are maintained. The project supported existing irrigation schemes and renovated these. Dam construction did not pose significant environmental risks.

Evaluation rating for cross-cutting issues: Satisfactory.

5. Conclusions and recommendations

5.1 Conclusions

Conclusion 1. Strategic relevance: communities living in the vicinity of the wetlands are highly dependent on these areas for their subsistence economy. Climate change will have a big impact on these ecosystems and may lead to increased vulnerabilities to disasters. The high demand for water for agriculture (rice) has threatened the future of the wetlands, and chemical fertilizer and pesticide use has increased risks to biodiversity and the livelihoods and health of the communities. This project aimed to maintain a balance between human needs and conservation needs. It is very relevant to the future of these areas in the Lao People's Democratic Republic.

101. The Lao People's Democratic Republic ratified the Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar Convention) in 2010, and the project is in line with this global commitment. The 2009 National Adaptation Programme of Action to Climate Change (The Lao People's Democratic Republic, 2009) under the Ninth Conference of the Parties to the United Nations Framework Convention on Climate Change, the National Strategy on Climate Change (The Lao People's Democratic Republic, 2010) and the National Integrated Water Resources Management Plan are in place alongside the current National Socio-economic Development Plan (2016–2020) (Ministry of Planning and Investment, 2016). These aim to support the adoption of the Ramsar Convention and encourage river basin management plans as integrated water resources management. Initiatives like this project are suitable for further investment to meet the country's needs.

Conclusion 2. Effectiveness (progress towards results): the project was able to accomplish most of its planned activities and shows signs of positive change in both household economies and wetland ecosystem conservation. It was able to enhance the capacity of the relevant government authorities and community groups. The project achieved the following: i) enhanced knowledge on climate change impacts and risks in wetlands among provincial and district agencies and communities, as well as enhanced capacities to design and implement CCA and DRM measures; ii) implemented various efficient and cost-effective adaptation measures (alternative livelihood activities); iii) trained provincial and district officers from relevant institutions on cost-effective CCA and DRM measures to influence planning and budgeting processes that mainstream CCA; and iv) conducted M&E and knowledge management activities and arranged a system for monitoring and sharing lessons with a wide range of stakeholders. However, the planned baseline survey was not done for some indicators. This hampered the objective assessment of progress.

102. Some activities started recently, but a few had yet to begin by the time of the evaluation. Veterinary training was useful for the farmers but needs further work to ensure a proactive approach to preventative animal health. After the improved management of 46 FCZs, the populations of local fish species increased with almost 14 000 households benefitting from fish consumption and sales. The project completed wetland protection activities in 3 666 ha (including the FCZs). Water level and quality monitoring in different wetlands are now carried out regularly. This helps to predict disaster risks like flooding, but there is not a channel or mechanism to disseminate early warning notices to the villagers.

Conclusion 3. Efficiency: initially, the project could not progress as planned until 2018. In fact, the actual implementation of most of the activities started in mid-2019. COVID-19 restrictions on mobility and flooding in 2020 also affected project implementation. Regardless, the project was able to complete many activities in a short amount of time with the help of the provincial and

district governments and support from community members. The change in modality to directly supporting provincial and district offices of the Ministry of Natural Resources and Environment was a good decision and improved efficiency. The long procurement processes and requirements from FAO also affected implementation. The project did not establish any synergies with or complementarities to any other projects in the wetlands. The PMU monitoring and reporting was weak. Some well-off households were selected to receive livelihood support as several poor and wetland-dependent households were left behind.

Conclusion 4. Sustainability: the project strengthened sustainability prospects through capacity building for relevant government officers at provincial and district levels and awareness raising among local farmers. Revolving funds were established in villages for different livelihood activities, which should help to continue local activities beyond the project's lifespan. The project established village-level community management committees for all activities. They were also trained on and involved in implementation processes. Provincial and district government officials also noted that they will continue using lessons from this project in efforts to gain donor support for future initiatives. The project established a Ramsar steering committee at national and provincial levels, which will continue to monitor the Ramsar sites and activities.

103. There are still gaps in understanding veterinary aspects among the villagers. The government has a limited amount of technical experts. They are based in provincial offices and could not support all of the villages. There is a need to address "free riders" – those who practice illegal fishing in restricted wetlands. Further initiatives and monitoring after project closure may be affected due to the limited budget with the government. The most significant threat to sustainability is the government's priority of rice cultivation. This could increase threats of encroachment and chemical fertilizer and pesticide use. Indeed, this affects the wetlands and the biodiversity within them. Organic vegetable farmers have experienced problems with pests. If left unaddressed, then farmers may stop this activity and revert to chemical solutions.

Conclusion 5. Factors affecting performance: the project design could deliver the expected outcomes. The TOC was brief with limited alternative livelihood programmes and no provision of monitoring and knowledge management activities. These aspects were added later. The project objectives and components were clear, practical and feasible within the time frame. It involved the IUCN, which brought extensive experience in wetland conservation, and the NGO, Tétraktys, which also brought extensive experience in cultural site renovation for ecotourism. The project benefitted from the expertise of these institutions. Potential risks were identified during the project design phase, and mitigation measures were outlined in the project document. The implementing partner was fully engaged in decision-making processes, as well as the implementation of project activities and the monitoring of project results. The project developed a communications plan and implemented it well. The M&E system was practical. It was developed according to the standard provisions. The PMU monitoring and reporting was weak and could not identify the activities that had not been completed on the ground but were reported as complete. Further, problems in beneficiary household selection were not corrected on time due to weak monitoring.

Conclusion 6. Cross-cutting issues: the project design considered gender aspects. Attention was placed on gender equality and the involvement of women – especially during implementation. The project addressed the GEF Policy on Gender Mainstreaming (GEF, 2012) and the GEF-6 approach on gender mainstreaming and women's empowerment (GEF, 2013). Women's roles and available potential opportunities to provide economic benefits were analysed. Activities developed using that information. The handicraft, food processing, chicken raising and fishery activities targeted

women to strengthen them economically. Women were involved in project development and implementation. The project also developed and implemented a gender action plan.

104. The project activities were designed to ensure environmental and socioeconomic issues of the targeted Ramsar sites, as well as other important wetlands and the surrounding villages. Environmental and social risks were reviewed and any identified mitigation measures were adhered to throughout project implementation.

Conclusion 7. Risk assessment: mitigation measures for risks were applied effectively. Project activities and risks were monitored every year during implementation to update the status and to see if there were any new risks. The project risks were rated as unlikely.

105. The overall terminal evaluation assessment of the project is Satisfactory.

5.2 Recommendations

106. Recommendations were grouped by: actions to protect and sustain progress and gains made from the project; actions to be completed within the remaining months of the project; and actions related to considerations for future initiatives in the wetlands of the Lao People's Democratic Republic.

5.2.1 Protecting and sustaining progress and gains made

Recommendation 1.1. To CAWA, FAO, the Ministry of Natural Resources and Environment and the Ministry of Agriculture and Forestry: it is recommended that FAO hold a meeting with all project stakeholders, plus potential stakeholders who may be involved in future wetland initiatives (conservation and rural development). The aim would be to reflect on the evaluation's findings. This meeting should share learnings from the project and initiate a dialogue on the most productive options for the government and other actors on the best ways to protect the gains made, communicate with wider audiences about these gains and ensure a positive enabling policy and resourcing environment for future development and donor investment (by the end of 2022).

107. This could involve dissemination events at both the FAO Regional Office for Asia and the Pacific and FAO headquarters. This way, learnings from the project can be absorbed and factored into future project developments (ideally before key project staff depart).

108. The next two recommendations relate to this first recommendation and may be part of the discussions at future meetings.

Recommendation 1.2. To CAWA, the Provincial Office of Natural Resources and Environment, the Ministry of Natural Resources and Environment and the FAO Country Office: FAO should coordinate with the Ministry of Natural Resources and Environment and the Provincial Office of Natural Resources and Environment on how legislative provisions for regular Ramsar steering committee meetings and supervision of the Ramsar sites can be best agreed upon and carried out so that long-term strategic functioning of this committee can continue (by December 2022).

Recommendation 1.3. To PMU (CAWA), the Provincial Office of Natural Resources and Environment and the Provincial Office of Agriculture and Forestry: it is recommended that FAO coordinates with the Provincial Office of Natural Resources and Environment and the Provincial Office of Agriculture and Forestry to arrange continuous monitoring and feedback mechanisms beyond the project's lifespan. This should include community monitoring and reporting to the

District Office of Agriculture and Forestry and, through them, to the Provincial Office of Agriculture and Forestry and the Ministry of Agriculture and Forestry (from June to December 2022).

5.2.2 Ensuring the orderly completion of outstanding project commitments with additional activities if time and resources allow

Recommendation 2.1. To CAWA, the Provincial Office of Agriculture and Forestry and the District Office of Agriculture and Forestry: the orderly and timely completion of all field activities should be done during the extended period from June to December 2022. In some cases, like dam construction and height increases for existing dams, this may not be possible to complete by December 2022 due to high water levels. This needs to be factored into plans and commitments with the relevant government authorities and affected communities in order to agree upon responsibilities for completion.

Recommendation 2.2. To FAO and CAWA: conduct the demarcation and formation of management committees in the important wetlands that still need to be demarcated.

Recommendation 2.3. To PMU (CAWA) and the FAO Country Office: monitor all remaining activities to verify the status of project activities on the ground and to ensure a final, accurate capture of progress.

Recommendation 2.4. To PMU (CAWA): develop an updated exit strategy with provisions related to sustaining project progress and clarity on handover arrangements (from June to December 2022).

109. If time and resources can be allocated, further recommendations include the following:

- i. Conduct organic pest control trainings for organic vegetable farmers so that they will not be tempted to revert to chemical pesticides and stop farming organically (a few pilots are suggested for the extended period from June to December 2022).
- ii. Conduct a light assessment of the trainees (government and community) to evaluate change in their knowledge after the trainings (from June to December 2022).
- iii. Conduct bookkeeping trainings for members on the revolving funds to improve their understanding and management of these funds and provide sufficient knowledge to track monetary transactions.
- iv. Conduct more gender-focused awareness and livelihood activities in all villages, especially those that still need to be covered.
- v. Conduct further training for district-level veterinary staff. Explore possibilities with the veterinary institute to provide students with internships in these villages and to bolster support.

5.2.3 For future projects

Recommendation 3.1. To FAO: conduct baseline studies for future projects, covering all significant activities so that change from project interventions can be objectively assessed over time.

Recommendation 3.2. To FAO: for future projects, also ensure that there is an optimum level of coverage for prioritized geographic zones and participating communities and households so that interventions are not spread too thin and risk marginal positive change. Efforts to diversify income generation and alternative livelihood programmes that prioritize poor households and women should involve feasibility studies on high-value crops and livestock, local versus improved varieties

and the suitability of such interventions for the wetlands context. Sufficient training and support on organic disease and pest control should be provided to ensure that organic farming and livestock initiatives are supported.

Recommendation 3.3. To FAO, the Provincial Office of Agriculture and Forestry and the District Office of Agriculture and Forestry: stakeholders should actively explore the development of a new major project initiative in order to build on CAWA. In fact, there are considerable challenges that remain in the sustainable protection of the wetlands and viable livelihoods for the communities (see Recommendation 1).

6. Lessons learned

6.1 Strategic

110. An initial LOA was signed with the Ministry of Natural Resources and Environment. Due to the Ministry's centralized one door policy, the approval process was very and money disbursement to the province/district were delayed, resulting in delay in implementation of activities. Later, the LOA was done directly with provincial and district offices of the Ministry of Natural Resources and Environment and the Ministry of Agriculture and Forestry. This arrangement of working directly with the local government improved the project's implementation process.

6.2 Design

111. Detailed studies of the hydrology and ecology of Ramsar sites and other surrounding wetland ecosystems is essential to address wetland issues and design an effective programme and management plan. The project was initially designed to target two wetland areas, but many important surrounding wetlands were not included. The project's target villages increased from 24 to 89 based on initial studies of the area. This expansion in the project's scope, from a narrow focus on Ramsar sites to a wider focus on landscape conservation, helped to safeguard the entire ecological and hydrological system connected to these two Ramsar sites.

6.3 Management

112. The experience from this project demonstrates that community involvement makes implementation easier. It also contributes to building ownership and enhancing sustainability prospects. Project management, however, needed to monitor the household section very carefully for the livelihoods programme. Despite the fact that support was meant for poor wetland-dependent households, some well-off villagers benefited from the project. In fact, project management was unable to check these aspects. This ended up excluding many targeted poor people who would have needed the project. As a result, the project's objective could not be met.

113. Implementing the project through the existing government structures made the project cost-effective and built ownership among national and local authorities.

114. Involving community members in the implementation process boosts their skills. Training community members on various livelihood aspects and wetland conservation, the formation of community committees for all activities and the establishment of revolving funds for livelihood activities makes the project results sustainable.

115. Poor monitoring on behalf of project management resulted in several incomplete activities on the ground, even though they were reported as complete in reports. This has an impact on achieving the project's objectives.

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The Evaluation Team also consulted the following documents:

- The GEF-approved project document and any updated and approved document following the inception workshop, with latest budgets showing budget revisions
- Annual work plans and budgets (including budget revisions)
- All annual GEF PIRs
- All other monitoring reports prepared by the project
- List of project sites and site location maps
- Execution agreements under the Operational Partners Implementation Modality and LOAs
- Relevant technical, backstopping and project-supervision mission reports, including back-to-office reports by relevant project and FAO staff, including any reports on technical support provided by FAO headquarters or regional office staff
- Meeting minutes from the project steering committee, the FAO Project Task Force and other relevant groups
- Any awareness raising and communications materials produced by the project
- Finalized GEF focal-area tracking tools at CEO endorsement, as well as updated tracking tools
- Technical reports

Appendix 1. People interviewed

	Surname	First name	Role/Location
CAWA office in Vientiane six people, two women			
1.	Abhay	Sitthideth	M&E and Participation Specialist
2.	Jeanes	Kevin	Chief Technical Adviser (FAO Country Office-CAWA)
3.	Sengsavang	Kingsada	Knowledge Sharing Specialist
4.	Thammavong	Chanthaphone	Capacity Development Expert
5.	Vanmanivong	Pany	Administrative Officer
6.	Xaiyaphoum	Pakaydao	Operations Officer
CAWA in Savannakhet Province three people			
7.	Khanthavong		Tétraktys field coordination
8.	Kodsanalai	Sisongkham	FAO-CAWA Assistant Facilitator, Savannakhet Provincial Office of Natural Resources and Environment
9.	Phanthavong	Phoumixay	FAO-CAWA Facilitator, Savannakhet Provincial Office of Natural Resources and Environment
CAWA in Champasack Province one person			
10.	Seuwanivong	Souckphamixay	CAWA Facilitator of Champasack Province
IUCN two people			
11.	Brakkels	Peter	IUCN The Lao People's Democratic Republic, Biodiversity Coordinator
12.	Seuasing	Khamphath	IUCN Khammouane Province
Provincial Office of Natural Resources and Environment, LWU and Provincial Office of Agriculture and Forestry Savannakhet (government officers) 11 people			
13.	Bounleum		Provincial Office of Agriculture and Forestry
14.	Dalasavong	Chanphensay	Deputy Director of Savannakhet Provincial Office of Natural Resources and Environment
15.	Ilatda		Provincial LWU
16.	Orlavan		Provincial Office of Agriculture and Forestry
17.	Phasouk		Provincial Office of Natural Resources and Environment
18.	Phounpakone	Oukham	Head of EWMH, Savannakhet Provincial Office of Natural Resources and Environment
19.	Phouthon		Provincial Office of Agriculture and Forestry
20.	Sengpachan	Kideng	Savannakhet Provincial Office of Natural Resources and Environment
21.	Sengsivisack		Provincial Office of Agriculture and Forestry
22.	Somvang		Provincial LWU
23.	Sysouvong	Vilayphone	Head of Administrative Office, Savannakhet Provincial Office of Natural Resources and Environment
Provincial Office of Natural Resources and Environment and Provincial Office of Agriculture and Forestry, Champasack (government officers)			
24.	Inthichack	Sengsouliyan	Deputy Head of Meteorology, Provincial Office of Natural Resources and Environment, Champasack Province
25.	Sengkapkeo	Vanny	Provincial Office of Agriculture and Forestry, Champasack Province
District Office of Natural Resources and Environment, LWU, District Office of Information, Culture and Tourism and District Office of Agriculture and Forestry, Savannakhet (government officers)			

Appendix 1. People interviewed

	Surname	First name	Role/Location
26.	Doungmad	Khonesavan	Deputy Head of District Office of Agriculture and Forestry, Champhone District
27.	Hommany		District Office of Agriculture and Forestry, Champhone District, Savannakhet Province
28.	Inthilad	Seng Aloun	District Office of Information, Culture and Tourism, Champhone District
29.	Keoudon		Head of District Office of Natural Resources and Environment, Champhone District
30.	Langsivong	Boutsadee	District LWY, Sonnabouli District, Savannakhet Province
31.	Lattamisavang	Kolakan	District Office of Natural Resources and Environment, Sonnabouli District, Savannakhet Province
32.	Madmanivong	Bounyor	Deputy Head of District Office of Information, Culture and Tourism, Champhone District
33.	Phaxaysithideth	Tipphaphone	District Office of Agriculture and Forestry, Champhone District
34.	Phimvongsa	Laxon	District Office of Natural Resources and Environment, Champhone District
35.	Phoulatsamee		Deputy Head Office, District Office of Natural Resources and Environment, Songkhone District
36.	Silivong	Nounit	District Office of Agriculture and Forestry, Sonnabouli District, Savannakhet Province
37.	Somkit Xayasone		Deputy Chair of LWU, Songkhone District, Savannakhet Province
38.	Somphan		Deputy Head Office, District Office of Agriculture and Forestry, Songkhone District
39.	Veingxay	Khampay	District Office of Information, Culture and Tourism, Champhone District
District Office of Natural Resources and Environment, LWU and District Office of Agriculture and Forestry, Champasack (government officers)			
40.	Sitthisene	Phoukhan	Deputy Chair of LWU Pathoumphone District, Champasack Province
41.	Vongkhamchan	Orlathai	Deputy Head of District Office of Agriculture and Forestry, Pathoumphone District, Champasack Province
42.	Xaysimeung	Douangvilay	Deputy Head of District Office of Natural Resources and Environment, Pathoumphone District, Champasack Province
43.	Xaysithong	Vilayvan	District Office of Natural Resources and Environment of Pathoumphone District, Champasack Province
Villages in Savannakhet Province			
Kaengkokdong village			
44.	Buoathong	Tang	Military for monitoring wetland management, Kaengkokdong village, Champhone District of Savannakhet Province
45.	Chansamone		Village LWU, Kaengkokdong village, Champhone District, Savannakhet Province
46.	Chanthala		People, Kaengkokdong village, Champhone District, Savannakhet province
47.	Janloue		Village elder organization, Kaengkokdong village, Champhone District, Savannakhet Province

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	Surname	First name	Role/Location
48.	Kinoi		Police for monitoring wetland management, Kaengkokdong village, Champhone District of Savannakhet Province
49.	Lamphan		Police for monitoring wetland management, Kaengkokdong village, Champhone District of Savannakhet Province
50.	Lei		Police for monitoring wetland management, Kaengkokdong village, Champhone District of Savannakhet Province
51.	Painguen		Farmer, Kaengkokdong village, Champhone District, Savannakhet Province
52.	Saisamone		Deputy Head, Kaengkokdong village, Champhone District, Savannakhet Province
53.	Saly		Police for monitoring wetland management, Kaengkokdong village, Champhone District, Savannakhet Province
54.	Silavan	Bounma	Deputy Head, Kaengkokdong village, Champhone District of Savannakhet Province
55.	Somsanouk		Police for monitoring wetland management, Kaengkokdong village, Champhone District of Savannakhet Province
56.	Soulinda	Mixay	Secretariat party, Kaengkokdong village, Champhone District, Savannakhet Province
57.	Thong		Village elder organization, Kaengkokdong village, Champhone District, Savannakhet Province
58.	Vilaisack		Farmer, Kaengkokdong village, Champhone District, Savannakhet Province
Nonvilayvan village of Champhone District 13 people, five women			
59.	Boumala		
60.	Chantha		
61.	Gneun		
62.	Khammee		
63.	Khonesamai		
64.	Kom		
65.	Mon		
66.	Montha		
67.	Nee		
68.	Nong		
69.	Pean		
70.	Phouwa		
71.	Suew		
72.	Thip		
73.	Toun		
Kadan village of Champhone District 13 people, five women			
74.	Insixiangmai	Pongsavath	Village LWU, Kadan village, Champhone District, Savannakhet Province
75.	Kanthaly		Farmer, Kadan village, Champhone District, Savannakhet Province
76.	Lamgneun		Farmer, Kadan village, Champhone District, Savannakhet Province
77.	Lamgneun nsixiangmai		Farmer, Kadan village, Champhone District, Savannakhet Province

Appendix 1. People interviewed

	Surname	First name	Role/Location
78.	Lamkeo		Farmer, Kadan village, Champhone District, Savannakhet Province
79.	Ny		Farmer, Kadan village, Champhone District, Savannakhet Province
80.	Phou		Farmer, Kadan village, Champhone District, Savannakhet Province
81.	Somphan		Farmer, Kadan village, Champhone District, Savannakhet Province
82.	Somsanouk		Deputy Head, Kadan village, Champhone District, Savannakhet Province
83.	Soumpoukdy	Kipan	Police for monitoring wetland management, Kadan village, Champhone District, Savannakhet Province
84.	Tappinan	Phoim	Village head, Kadan village, Champhone District, Savannakhet Province
85.	Tapsavath	Bounyang	Deputy Head, Kadan village, Champhone District, Savannakhet Province
86.	Xaychaleun	Somboun	Village LWU, Kadan village, Champhone District, Savannakhet Province
Taleo village of Champhone District nine people			
87.	Bounthan		Farmer, Taleo village, Champhone District, Savannakhet Province
88.	Bounyung	Ki	Village elder organization, Taleo village, Champhone District, Savannakhet Province
89.	Laem		Farmer, Taleo village, Champhone District, Savannakhet Province
90.	Phone		Village LWU, Taleo village, Champhone District, Savannakhet Province
91.	Sanun		Fish hatchery, farmer, Taleo village, Champhone District, Savannakhet Province
92.	Sitthideth		Village head, Taleo village, Champhone District, Savannakhet Province
93.	Thongkoun		Village elder organization, Taleo village, Champhone District, Savannakhet Province
94.	Thongvuen		Village elder organization, Taleo village, Champhone District, Savannakhet Province
95.	Xayalat		Deputy Head, Taleo village, Champhone District, Savannakhet Province
Dondaeng village of Champhone Province six people, one woman			
96.	Boulong		Village customs, Dongdeng village, Champhone District, Savannakhet Province
97.	Hongkham		Village police, Dongdeng village, Champhone District, Savannakhet Province
98.	Madmanivong	Phouvvin	Village financial, Dongdeng village, Champhone District, Savannakhet Province
99.	Nouphone		Village LWU, Dongdeng village, Champhone District, Savannakhet Province
100.	Pengsawai	Sisana	Deputy Head, Dongdeng village, Champhone District, Savannakhet Province
101.	Phommathep	Khampun	Village head, Dongdeng village, Champhone District, Savannakhet Province
Lamchan village of Champhone District six people, one woman			
102.	Bountang		Village elder organization, Champhone District, Savannakhet Province
103.	Davanh	Sivansing	Village VICT, Lamchan village, Champhone District, Savannakhet Province

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	Surname	First name	Role/Location
104.	Khanphan		Village police, Lamchan village, Champhone District, Savannakhet Province
105.	Lattanam		Village police, Lamchan village, Champhone District, Savannakhet Province
106.	Phetsamone		Village LWU, Lamchan village, Champhone District, Savannakhet Province
107.	Siphan		Farmer, Lamchan village, Champhone District, Savannakhet Province
Dongmueng village of Chmamphetamine District five people			
108.	Kailkeo		Village VICT, Dongmueng village, Champhone District, Savannakhet Province
109.	Khamvongsa	Siloun	Village head, Dongmueng village, Champhone District, Savannakhet Province
110.	Koutsombath	Daophet	Village LWU, Dongmueng village, Champhone District, Savannakhet Province
111.	Sengphet		Deputy Head, Dongmueng village, Champhone District, Savannakhet Province
112.	Toula		Village elder organization, Dongmueng village, Champhone District, Savannakhet Province
Nonsithan village of Champhone District two people			
113.	Phong		Chicken raising, Nonsithan village, Champhone District, Savannakhet Province
114.	Serd		Chicken raising, Nonsithan village, Champhone District, Savannakhet Province
Buengchang village, Sonabouli District one person			
115.	Bountak		Fish hatchery and culture, Buengchang village, Sonabouli District, Savannakhet Province
Phapho village, Pathoumphone District of Champasack Province six people, four women			
116.	Khone		Chicken raising of Phapho village, Pathoumphone District, Champasack Province
117.	Khounmanu	Phouvong	Fish hatchery and farming of Phapho village
118.	Lae		Organic farm of Phapho village
119.	Manivong	Sengphavan	Organic farm of Phapho village
120.	Thongsa		Organic farm of Phapho village
121.	Yo		Village veterinary worker of Phapho village, Pathoumphone District, Champasack Province
Phakka village, Pathoumphone District of Champasack Province eight people, one woman			
122.	Bounlup		Chicken raising of Phakka village, Pathoumphone District, Champasack Province
123.	Bounpone		Secretariat party of village, Phakka village, Pathoumphone District, Champasack Province
124.	Douangmany		Chicken raising of Phakka village, Pathoumphone District, Champasack Province
125.	Khampong		Head of village, Phakka village, Pathoumphone District, Champasack Province
126.	Khaophone		Village volunteer, Phakka village, Pathoumphone District, Champasack Province
127.	Kikeo		Deputy Head of village, Phakka village, Pathoumphone District, Champasack Province
128.	Phoxay		Village customs, Phakka village, Pathoumphone District, Champasack Province
129.	Somboun		Village LWU, Phakka village, Pathoumphone District, Champasack Province
Nongmak Ek village, Pathoumphone District four people, one woman			

Appendix 1. People interviewed

	Surname	First name	Role/Location
130.	Bounyang		Head of village, Nongmak Ek village, Pathoumphone District, Champasack Province
131.	Jame		Fish hatchery and culture, Nongmak Ek village, Pathoumphone District, Champasack Province
132.	Mone		Fish hatchery and culture, Nongmak Ek village, Pathoumphone District, Champasack Province
133.	Somphone		Fish hatchery and culture, Nongmak Ek village, Pathoumphone District, Champasack Province
Sanote village, Pathoumphone District of Champasack Province two people			
134.	Bounsom		Farmer fodder grass, Sanote village, Pathoumphone District, Champasack Province
135.	Vee and Pouk		Farmers chicken raising, Sanote village, Pathoumphone District, Champasack Province
Phommaluek village, Pathoumphone District of Champasack Province two people, one woman			
136.	None		Farmer chicken raising, Phommaluek village, Pathoumphone District, Champasack Province
137.	Peng		Farmer chicken raising and fodder grass, Phommaluek village, Pathoumphone District, Champasack Province
Topsok village, Pathoumphone District of Champasack Province three people			
138.	Bounsone		Farmer fodder grass, Topsok village, Pathoumphone District, Champasack Province
139.	Bounthavy		Farmer fodder grass, Topsok village, Pathoumphone District, Champasack Province
140.	Seng and Boun		Farmer chicken raising and fodder grass, Topsok village, Pathoumphone District, Champasack Province
Kietngong village, Pathoumphone District of Champasack Province two people			
141.	Khamkane		Village veterinary, Kietngong village, Pathoumphone District, Champasack Province
142.	Soukaseum		Farmer chicken raising and fodder grass, Kietngong village, Pathoumphone District, Champasack Province

Appendix 2. Terminal evaluation itinerary, including field missions

Date	Diary
6 May 2022	International consultant (Arun Rijal) left Nepal for the Lao People's Democratic Republic
7 May 2022 (Saturday)	International consultant in quarantine so online meeting with national consultant National consultant (Bounthong Sevillaykham) leaves Savannakhet for Vientiane to start the CAWA evaluation
8 May 2022 (Sunday)	Continue online meetings with both consultants to prepare meeting with the Department of the Environment and the IUCN teams in Vientiane and to discuss field plans
9 May 2022	<ul style="list-style-type: none"> • Face-to-face meeting with Arun Rijal at the Sodee hotel to prepare meeting with the CAWA project team (Kevin) • Meeting with the CAWA project team (Kevin and project staff): improve schedule; project background and implementation; and prepare meeting with the Department of Environment, FAO and the IUCN for the next day (10 May 2022)
10 May 2022	<ul style="list-style-type: none"> • Morning: since the Department of Environment is not available at the time, the team continues the discussion with the CAWA project team (Kevin and project staff), getting more information and preparing materials for field work at the CAWA office • Afternoon: meeting with Olayvanh Singvilay FAO Country Office to discuss project implementation and monitoring
11 May 2022	Leave Vientiane for Savannakhet Province to prepare meeting with the Provincial Office of Natural Resources and Environment, the LWU and the Provincial Office of Agriculture and Forestry on 12 May 2022
12 May 2022	<p>Morning: meeting and discussion with the Provincial Office of Natural Resources and Environment for ten activities and with the LWU for five activities in Savannakhet Province</p> <p>Afternoon: meeting and discussion with the Provincial Office of Agriculture and Forestry on improving livelihoods with a focus on the conservation and development of fisheries, animal husbandry and veterinary medicine</p>
13 May 2022	<p>Leave Savannakhet for Champhone District</p> <p>Meeting with committees of the Kaengkokdong village about implementation and progress of wetland management and NRM; visit Nongkan, Nongmaehang and Nongdern wetland complex and visit to areas</p> <ul style="list-style-type: none"> • Visit and discussion with famers growing organic vegetables in the Ononevilayvanh village and discuss with head of village committees • Overnight in Champhone
14 May 2022 (Saturday)	<ul style="list-style-type: none"> • Visit to the Kadan village and meeting with village committees about integrated livelihoods development • Visit and discussion with farmers practicing chicken farming and planting grass for large animal raising • Visit and discussion with famers practicing fish farming: bleeding, hatching, nursing and selling fingerlings • Visit and discussion with head of village committees at the Palaeng village on organizing a community fish pond • Overnight in Champhone
15 May 2022 (Sunday)	<p>Morning visit to Taleo village to meet discussion</p> <ul style="list-style-type: none"> • Ecotourism livelihoods; visit ecotourism investment site at the old temple in the Taleo village and discuss an ecocultural tourism development programme • Veterinary centre and vaccine fund, and plan of operation for animal disease control (poultry and ruminants) • Native chicken, duck production and hatchery (incubators) programme

Date	Diary
	<ul style="list-style-type: none"> • Fishery/aquaculture livelihoods; visit native fish hatchery and discuss native fish breeding and aquaculture programme • Water use and management agreement • Fodder introduction and ruminant livestock feed improvement plans • FCZ <p>Afternoon: visit the Dongdeng village and discuss ecotourism livelihoods, the turtle habitat at Nongpafa Lake and overnight in Champhone District</p>
16 May 2022	<p>Morning</p> <ul style="list-style-type: none"> • Visit and discussion on ecotourism livelihoods and ecotourism investment site at Hotay Pidock of the Nonglamchanh village with seven activities • Visit Souy Lake to observe the ecotourism investment site and monkey forest at the Dongmeuang village and discuss 11 activities <p>Afternoon: visit two households who get support for chicken raising at the Nonsithan village and visit the Houysue Lake to see wetland clearing and sediment removal</p> <p>Overnight in Champhone District</p>
17 May 2022	<p>Morning: meeting and discussion with the District Office of Natural Resources and Environment, the District Office of Agriculture and Forestry, the Provincial and District Office of Information, Culture and Tourism team to discuss project implementation progress, as well as ecotourism development in the Xe Champhone wetland area</p> <p>Afternoon: leave Champhone District for Sonabouli District; discussion with the District Office of Agriculture and Forestry, the District Office of Natural Resources and Environment and the LWU on project activities and implementation progress; visit to hatchery and pond construction that supported by the CAWA project; return and overnight in Champhone District</p>
18 May 2022	<p>Leave Champhone District for Songkhone District: discussion with the District Office of Agriculture and Forestry, the District Office of Natural Resources and Environment and the LWU on project activities and implementation progress; leave Songkhone District for Champasack Province and overnight in Champasack/Pakse</p>
19 May 2022	<p>Morning: meeting and discussion with the Provincial Office of Natural Resources and Environment and the Provincial Office of Agriculture and Forestry of Champasack Province on project activities and implementation progress for 16 activities</p> <p>Afternoon: leave Pakse for Pathoumphone District; meeting and discussion with the District Office of Agriculture and Forestry, the District Office of Natural Resources and Environment and the LWU on project activities and implementation progress; overnight in Pathoumphone District</p>
20 May 2022	<p>Visit Phapho and Pakka villages; meet with village committees and farmers who get support from the CAWA project for activities and discuss implementation progress</p> <ul style="list-style-type: none"> • FCZ management • water use, management agreement and dry season water storage (semi-natural ponds) • veterinary plan of operation for animal disease control (poultry and ruminants) • fodder development for livestock feed improvement plans • native chicken, duck production and hatchery (incubators) programme • organic vegetable producers • water hyacinth clearance and control <p>Overnight in Pathoumphone District</p>
21 May 2022 (Saturday)	<p>Visit villages: Phommaleuk, Sanote, Topsok, Phalai and Kietngong to discuss project activities and implementation progress with village committees and farmers:</p> <ul style="list-style-type: none"> • FCZ management • water use, management agreement and dry season water storage (semi-natural ponds) • veterinary plan of operation for animal disease control (poultry and ruminants) • fodder development for livestock feed improvement plans

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Date	Diary
	<ul style="list-style-type: none"> • native chicken, duck production and hatchery (incubators) programme • organic vegetable producers • water hyacinth clearance and control Overnight in Pathoumphone District
22 May 2022 (Sunday)	Leave Pathoumphone District of Champasack Province for Savannakhet Province and overnight in Kaison of Savannakhet Province
23 May 2022	Leave Savannakhet Province for Vientiane and overnight in Vientiane
24 May 2022	<ul style="list-style-type: none"> • Meeting and discussion with Khonsavanh Lounglad, national coordinator of the CAWA project/deputy director general of the DoE/Ministry of Natural Resources and Environment on project activities and implementation progress • Meeting and discussion with Kevin Jeanes, Chief Technical Adviser (FAO Country Office-CAWA), and ask some questions about project activities and implementation progress
25 May 2022	Development of preliminary findings report and presentation in Vientiane
26 May 2022	
27 May 2022	Debriefing meeting to share preliminary findings with the FAO Representative, the FAO Country Office, FAO CAWA, the DoE and the IUCN teams in Vientiane
28 May 2022 (Saturday)	International consultant returns to Nepal and national consultant returns to Savannakhet

Appendix 3. Terminal evaluation matrix (review questions and subquestions)

Evaluation questions	Indicator	Source	Methodology
Strategic Relevance			
1. To what extent has FAO and GEF's support to targeted areas been relevant? How did the project design respond to the needs, priorities and capacities of the project's main counterparts?	Relevant to address issues of the mountains, so directly related to needs, priorities and capacities of counterparts	Project document, annual/quarterly reports, key informant interviews	Comparison of project design (outcomes, TOC) with country/district needs and priorities
2. How did the project design respond to the priorities of the FAO Country Programming Framework and the GEF focal areas/operational project strategies?	Relevant to the FAO Country Programming Framework and the GEF focal area programme strategies	Project document, FAO Country Programming Framework, the GEF focal areas/operational programme strategy document, interviews with FAO and GEF staff	Comparison of project design (outcomes, TOC) with the FAO Country Programming Framework, the GEF focal areas/operational programme strategy
3. Are the project's expected outcomes congruent to the needs and priorities of the targeted beneficiaries (local communities, men and women, indigenous communities, etc.)?	Outcome congruent to the needs and priorities of the beneficiaries	Project document, annual reports, key informant interviews	Comparison of project outcomes with the needs and priorities of the beneficiaries; comparison of activities and outcomes with issues in the area
4. To what extent was the technical support provided by FAO relevant to the country?	FAO technical support relevant to address issues in the country	Baseline information technical status from the project document, role of technical support from FAO to various activities and achievement information from annual/quarterly reports, key informant interviews	Comparison of technical support provided by FAO with the baseline technical status of the country and changes after such support from FAO
5. To what extent were FAO's comparative advantages and existing complementarities with other partners taken into account in the project design?	Consideration of FAO comparative advantages and existing	Project document, key informant interviews	Analysis of project design (project document) to find out use of knowledge/lessons from FAO and other partners to address gaps in the

Evaluation questions	Indicator	Source	Methodology
	complementarities with other partners in project design		relevant sectors
6. Have there been any changes in the relevance of the project since its formulation? Is there any need to make changes in the design/activities to make it more relevant?	Changes in programme and inappropriateness of design/activities	Country document, project document, information from questionnaire survey, key informant interviews	Analysis of the baseline situation (climate change impact, vulnerability, policy, economic situation, technical capacity, knowledge base, climate change effect, etc.) of the targeted sites
7. To what extent is the project's results framework/logframe (i.e. TOC, intervention logic, indicators, etc.) appropriate to reach the project's goal and objectives?	Relevance of outputs and outcomes to attain objectives	Logframe and TOC information from project document, other project reports	Analysis of indicators (if they are specific, measurable, achievable, relevant and time-bound), baselines, analysis of internal and external coherence of results framework design and TOC; testing the TOC logic and assumptions
8. Is the project design suited to delivering the expected outcomes?	TOC, results framework and flow chart	Project document (TOC, results framework, flow chart)	Analysis of TOC, results framework and flow chart to see the connection of activities and issues
9. Is the project's casual logic coherent and clear?	TOC, results framework and flow chart	Same as above	Same as above
10. To what extent are the project's objectives and components clear, practical and feasible within the time frame allowed?	Same as above	Same as above	Same as above
Effectiveness (progress towards results)			
11. To what extent has the project achieved improved understanding among stakeholders on the risks of climate change and disaster mitigation of targeted wetlands?	Awareness level increased among stakeholders on risk of climate change and disaster	Knowledge assessment score in reports, key informant interviews	Analysis of change in knowledge level
12. What is the progress of implementation of project activities towards work plans?	Completion of activities planned in work plans	Key informant interviews, annual reports	Analysis of progress reports and interview information
13. How do recipients experience project interventions with regard to their livelihoods and their living environment?	Improved income, improved livelihoods	Annual reports, interviews with beneficiaries	Analysis of information from the report and beneficiaries' perception
14. Are there any barriers or other risks that may prevent future progress towards and the achievement of the project's longer-term objectives (long-term effectiveness)? What can be done to increase	Information on problems that were identified during	Key informant interviews, annual reports	Analysis of the report regarding problematic issues

Evaluation questions	Indicator	Source	Methodology
the likelihood of positive impacts from the project? To what extent can the progress towards long-term impacts be attributed to the project?	monitoring which was obstructing results or could obstruct results in the future		
15. Were there any unintended results?	Information on unintended results	Annual reports, interview with beneficiaries and key stakeholders	Analysis of information on unintended results
16. Is there any evidence of environmental stress reduction and environmental status change? Or any change in policy/legal/regulatory framework?	Information on stress reduction or improvement in environmental stress, development of policy/legal/regulatory framework	Interview with stakeholders, observations in the field, project reports	Analysis of information on environmental stress reduction or change in policy documents
17. To what extent can the attainment results be attributed to the GEF-funded component?	Information on results that are attributed to the GEF funded components	Annual reports	Analysis of information on the attainment of each component
18. To what extent may the progress towards long-term impact be attributed to the project?	Information on progress towards long-term impacts	Annual reports, key informant interviews	Analysis of progress information with expected long-term impacts
19. What is the added value of bringing the different interventions together under one programme?	Information on value added by the project intervention	Annual reports, interviews with informants	Analysis of information on achievement of different interventions
Efficiency			
20. To what extent was the programme implemented efficiently and cost effectively?	Project implementation information from PIRs and annual reports; information on the cost of implementation	Annual reports, PIRs, financial statements	Assessment of project achievement, actual costs and budget provisioned for the activities key informant interviews
21. How does the project's cost efficiency (cost/time) compare to that of similar projects?	Project implementation information from PIRs and annual reports; information on the cost	Annual reports, PIRs, financial statements	Assessment of project achievement, actual costs and budget provisioned for the activities, key informant interviews

Evaluation questions	Indicator	Source	Methodology
	of implementation		
22. To what extent did the programme implementation mechanism contribute to efficient implementation of the main outputs of the project?	Programme implementation information and information from the PMU staff	Annual project reports, work plans, PIRs, key informant interviews	Analysis of annual reports and PIRs against work plans, key informant interviews
23. Is the project's M&E plan and system in place?	M&E plan in place for regular monitoring	Annual project reports, key informants interviews, M&E plan	Analysis of annual reports and M&E plan against key informant interviews
24. Has a communications and dissemination strategy been developed and implemented?	Communications and dissemination strategy document developed and implemented	Annual reports, communications and dissemination strategy document	Review of communications plan, observed dissemination activities, information from key informants
25. Is the co-financing being made available to the project as planned to contribute to meeting project outputs, outcomes and objectives?	Co-financing information in the financial statements	Project document, financial statements, interviews with project staff	Assessment of project document and financial statements, discussion with the project team
20. Has project management been able to adapt to any changing conditions to improve the efficiency of programme implementation?	Change in management to adapt to the changing conditions	Annual reports, M&E reports, work plans, interviews with project staff	Assessment of work plans against progress reports, study of justifications for the change in activities, interaction with key informants
21. To what extent has the project built on synergies and complementarities with other similar projects, partnerships, etc. and avoided duplication of similar activities by other groups and initiatives?	Information of synergies and complementarities in the project document, PIRs and annual reports	Project document, progress reports, M&E reports	Assessment of project document, progress reports, M&E reports, key informant interviews
22. Has the agreement with the implementing partners been applied efficiently?	Implementation of agreed activities in annual reports and PIRs	Work plans, PIRs, agreement documents, progress reports, interviews with key project staff	Assessment of work plan, PIRs, agreement documents, progress reports, interviews with partners
Sustainability (It is early to analyse sustainability but the terminal evaluation will analyse if any commitment to continue technical or financial support to continue outcome of this project or upscaling of the lessons).			

Evaluation questions	Indicator	Source	Methodology
29. What is the likelihood that the project results can be sustained after the end of the project?	Information on the acknowledgement of project outcomes and provision for replication, the continuation of technical and institutional support; information on the replication of outcomes of the project and financial arrangements	Annual reports, commitment documents from the government or other institutions	Analyse the government or other institutions' commitments, replication plans, institutional structure developed by the project and capacity enhancement by the project; interviews with FAO, government partners and other partners to find out if they have any project in the pipeline or already approved that replicate results from this project
30. What are the key risks that may affect the sustainability of project results and its benefits (financial, socioeconomic, institutional and governance, and environmental aspects), as well as risks identified in the project document)?	Risks identified during risk review or experienced during implementation	Annual reports, risk review information, new risks identified in PIRs, key informant interviews	Analysis of the partnership strategy in the project document, financial and/or technical support from the partners, annual reports, information from partners
31. Have any project results, lessons or experiences been replicated (in different geographic areas) or scaled up (in the same geographic area, but on a much larger scale and funded by other sources)? What results, lessons or experiences are likely to be replicated or scaled up in the near future?	Information on the replication of project results	M&E reports, annual reports, work plans, key informant (project staff) interviews	M&E reports, annual reports and PIRs will be analysed to see if lessons from the project are replicated to other areas or not; similarly, information on replication will also be acquired from key informants
32. Has the project established sustainable institutional arrangements or cross-sector partnerships?	Information on sustainable institutional arrangements or partnerships	Same as above	Same as above
Factors affecting progress			
33. Is the co-financing being made available to the project as planned to contribute to meeting project outputs, outcomes and objectives?	Co-financing information in the financial statements	Project document, financial statements, interviews with project staff	Assessment of project document and financial statements, discussion with the project team
34. What have been the financial-management challenges of the project? To what extent has pledged co-financing been delivered? Has any additional leveraged co-financing been provided since implementation?	Information on financial management co-financing in the project document and annual reports	Project documents, annual reports, interviews with finance staff	Financial information from annual reports will be analysed against the project document; financial statement regarding co-financing and the delivery of the committed amount will be analysed and issues related to this will be

Evaluation questions	Indicator	Source	Methodology
			acquired from relevant staff
35. Has the agreement with the implementing partners been applied efficiently?	Implementation of agreed activities in annual reports and PIRs	Work plans, PIRs, agreement documents, progress reports, interviews with key project staff	Assessment of work plans, PIRs, agreement documents and progress reports, interviews with partners
36. How do the various stakeholders see their own engagement with the project?	Work plan with division of work, information about the expertise of stakeholders; information from interviews with stakeholders	Work plan, interviews with stakeholders	Analysis of work plan against the expertise of the stakeholders and their capacity; interviews with stakeholders for their views on their engagement
37. Were local actors – civil society or private sector – involved in project design or implementation and what was the effect on project results?	Stakeholder engagement plan, work plan with information on activities and responsible institutions, annual reports and PIRs with progress information	Project document, PIRs, annual reports, work plans, interviews with stakeholders	Review of project document, work plans and stakeholder engagement plan, interviews with stakeholders, see achievement of tasks allocated to different stakeholders
38. Is the project on track as it was originally designed or have there been delays in the project approval, implementation and reporting process? What are the major reasons for the delay?	Information on project progress and planned activities	Work plans, PIRs, annual reports, key informant interviews	Review of work plans, PIRs and annual reports, interaction with project staff regarding project implementation issues
39. To what extent did the executing agency effectively discharge its role and responsibilities in managing and administering the project?	Information on project execution and roles and responsibilities performed by the executing agency; performance information in PIRs and annual reports	Same as above	Same as above
40. How well is the PMU functioning?	Information on achievement in PIRs, annual reports;	PIRs, annual reports, interviews with stakeholders regarding	Information from PIRs; annual reports on performance will be cross-checked with the stakeholders to find out the role of the PMU

Evaluation questions	Indicator	Source	Methodology
	information from stakeholders on PMU function	PMU performance	
41. Are there sufficient human resources, financial resources, etc. for the PMU operation, and does it have the capacity to support project implementation?	Information on human, financial and physical resources with the PMU	Management structure report, human, financial and physical resources information, M&E reports, interviews with project staff	Analysis of administration structure, technical and financial capacity and technical assistance from different sectors to the PMU to analyse the capacity of the PMU; information from key informants will add to this analysis
42. What have been the main challenges in terms of the project management administration?	Information on challenges in PIRs, annual reports and from stakeholders	Same as above	Same as above, analysis of challenges and adaptation made by the project to address them
43. How well have risks been identified and managed?	Information on risk analysis and mitigation measures adopted	Project document, PIRs, key informant interviews	Review of risks in the project document, PIRs and annual reports; information will be acquired from the implementing agencies on mitigation measures adopted to address risks
44. To what extent has FAO delivered oversight, supervision and backstopping (technical, administrative and operational) during the project identification, formulation, approval, launch and execution? What kind of support or changes are expected from FAO by the execution partners?	Oversight and supervision information in annual reports and PIRs; information from stakeholders	Same as above	Role of FAO in project implementation will be analysed against the provision of FAO's responsibility in the project document; stakeholder views on this will also be collected
45. How effective has the project been in communicating and promoting its key messages and results to partners, stakeholders and a general audience?	Communications materials, communications programme information, effectiveness, views of partners, stakeholders and general audience	Communications plan, communications materials, news on programme in local newspapers, views of partners and stakeholders	Analysis of the communications plan, communications materials, information on the effectiveness of the communications activities from news coverage in newspapers and from partners and stakeholder views
46. Is the project's M&E system practical and sufficient? How has stakeholder engagement and gender assessment been integrated into the M&E system?	Information on the M&E system and gender assessment provision in the project document	M&E document, progress reports, key informant interviews	Review M&E document and analyse M&E reports; generate information from key informants

Evaluation questions	Indicator	Source	Methodology
	and the M&E system		
47. Was the project M&E system operating as per the M&E plan? Has information been gathered in a systematic manner, using appropriate methodologies?	M&E plan and M&E report	M&E plan, M&E reports, key informant interviews	Analysis of project M&E plan and M&E reports; information from key informants on M&E implementation
Cross-cutting issues			
48. To what extent were gender considerations and human rights reflected in the project design?	Gender consideration in decision-making, project design and benefit distribution	Project document, annual and quarterly reports, interviews with informants	Analysis of the project design and implementation plans to see gender and human rights considerations
49. To what extent were gender considerations (equality) taken into account in designing and implementing the project? Has the project been designed and implemented in a manner that ensures gender-equitable participation and benefits? Was a gender analysis done? How was gender in decision-making?	Gender information in the project document, implementation plan and gender analysis report	Project document, annual reports, PIRs, key informant interviews	Analysis of project document to see if gender analysis was conducted or not; similarly, gender participation in project design, implementation, benefit sharing and decision-making; activities will also be analysed in light of FAO gender equality policy and the GEF gender policy
51. To what extent were environmental and social concerns taken into consideration in the design and implementation of the project? Has the project been implemented in a manner that ensures the ESS mitigation plan (if one exists) has been adhere to?	Environmental and social considerations in the project document and implementation plans	Project document, annual reports, key informant interviews	Analysis of environmental and social concerns in the project document and project implementation; information will also be acquired from key informants

Appendix 4. Results matrix showing achievements at the end and terminal evaluation observations (progress towards achieving project objectives and outcomes)

Please note that these data are drawn from the 2021 PIR, with commentary by the Evaluation Team on progress. Implementation status figures are based on progress at the time of the evaluation data collection.

Results chain	Indicators	Baseline	End of project target	Achievements to date (May 2022)	Implementation status (%)	Terminal evaluation rating	Justification for rating
Objective: to reduce climate change vulnerability of communities and the fragile wetland ecosystems upon which they depend							
Outcome 1: improved understanding of climate change impacts and risks in the Xe Champhone and Beung Kiat Ngong wetlands	Outcome Indicator 1.1: perceptions and understandings of climate change impacts and risks resulting from training and vulnerability assessments in the Provincial Office of Natural Resources and Environment, the District Office of Natural Resources and Environment, the Provincial Office of Agriculture and Forestry, the District Office of Agriculture and Forestry, and communities around the target wetlands	Some limited awareness of climate change vulnerability due to: a) the climate change and wetlands study in Xe Champhone by the Mekong River Commission and in Beung Kiat Ngong due to Mekong Water Dialogues work; and b) the Mekong River Commission's Climate Change and Adaptation Initiative in Savannakhet, etc. and project preparation grant discussions	Seventy percent of members of the Provincial Office of Natural Resources and Environment, the District Office of Natural Resources and Environment, the Provincial Office of Agriculture and Forestry, and the District Office of Agriculture and Forestry staff covering the target wetlands (28 out of 40) and 70% of members of community organizations (both men and women) in the target villages are aware of climate change impacts and risks	KAP survey results in May 2019 suggest 98% of staff members involved in the CAWA project, and 55% (weighted average) of villagers stated that they are aware of climate change impacts and risks Awaiting updated KAP survey Active (from 2019 to 2022) livelihood, CCA and DRM field activities with the Provincial Office of Natural Resources and Environment, the District Office of Natural Resources and Environment, the Provincial Office of Agriculture and	Estimated greater than 90% of agency staff that were involved in CAWA and greater than 75% of community members involved in CAWA in both provinces are expected to be aware of climate change impacts and risks, and will be able to implement CCA/DRM/NRM response measures	MS	It is said KAP survey result of 2019, but the results are exactly the same copied from the PIR of 2017; target indicators are same as of initial, i.e. 2016 PIR. Why did the number of target population not increase when the number of villages increased from 24 to 89? The percentage is calculated using the project's initial target population but not increased population after 2019 redesign. This applies to all outcome/output indicators. Besides endline KAP/qualitative survey needs to be conducted within the last six months of the project

Results chain	Indicators	Baseline	End of project target	Achievements to date (May 2022)	Implementation status (%)	Terminal evaluation rating	Justification for rating
Objective: to reduce climate change vulnerability of communities and the fragile wetland ecosystems upon which they depend							
				Forestry, the District Office of Agriculture and Forestry, LWU staff, and expanded wetland communities (inclusive of the 2020 management plan review of key CCA/DRM/NRM issues impacting wetlands and livelihoods) have further advanced agency staff and community understanding of climate change impacts and CCA/DRM response compared to levels recorded in the February 2019 KAP survey			from July to December 2022
Outcome 2: efficient and cost-effective adaptation measures in place to reduce the impact of climate change and natural disasters on wetland ecosystems and local livelihoods	Outcome Indicator 2.1: number of households in the 20 villages within the current Ramsar site boundaries involved in adaptive agricultural practices, systems and infrastructure (e.g. climate-smart	Around 160 households are applying two or more of these practices	One thousand two hundred eighty households (total of 8 400 household members) apply two or more of these practices	Two thousand ninety-six households within or surrounding the wetlands involved in and benefiting from one or more adaptive on-farm or within wetlands livelihood practices, systems and infrastructure, which include activities related	100%	MS	Households provided with non-farm benefits was less than targeted household number; level of impact varies Activities like mushroom farming were not conducted due to the unavailability of the vessel needed to stem

Results chain	Indicators	Baseline	End of project target	Achievements to date (May 2022)	Implementation status (%)	Terminal evaluation rating	Justification for rating
Objective: to reduce climate change vulnerability of communities and the fragile wetland ecosystems upon which they depend							
	agriculture, improved cropland management, dry and wet season rice cultivation, livestock production, aquaculture)		<p>Eight hundred households (men and female equal) benefitting from non-agriculture off-farm livelihoods support with equal benefits (men and women)</p> <p>Six thousand four hundred households from proposed extended sites with equal benefits for men and women</p> <p>Indices of management effectiveness are maintained at least at baseline levels over the 47 360 ha</p>	<p>to crops, fisheries, aquaculture, livestock and irrigation About 600 households from wetland areas are involved in and benefited from at least one non-agricultural off-farm livelihood support option (ecotourism, NTFPs, handicrafts, value added wetland products)</p> <p>Thirteen thousand eight hundred twenty-nine households benefited from improved fish consumption and sales from 46 FCZs 1 925.3 ha (direct management) 636 000 ha (managed zone): revised, the 2019 CAWA wetland landscape management planning and implementation approach has shifted the wetlands habitat protection focus</p>	<p>70%</p> <p>100%</p> <p>100%</p>		<p>seed of mushroom in the district and also in Champasak Province; they expect to find it in the market of Savannakhet Province; also number of target communities supposed to increase with increase of villages from 24 to 89 but still target is same as initial document; the raising of dam height in two wetlands and the construction of a dam in one wetland was not done (more explained in following comments)</p>

Results chain	Indicators	Baseline	End of project target	Achievements to date (May 2022)	Implementation status (%)	Terminal evaluation rating	Justification for rating
Objective: to reduce climate change vulnerability of communities and the fragile wetland ecosystems upon which they depend							
			Two Ramsar sites with 1 020 ha of wetland habitats under improved direct management to address climate change-induced risks	(hydrology, native habitat, fish migration) A total of 2 053 ha of wetlands habitat under different types of direct management	100%		
Outcome 3: efficient and cost-effective CCA and DRM measures in wetlands integrated and budgeted in local and national planning processes	Outcome Indicator 3.1: number of local, regional and national plans that incorporate climate change vulnerability assessments and CCA measures and analyses (plus mitigation measures as needed) of impacts on wetlands with corresponding budget allocation	No local plans include the application of CCA/DRM assessment approaches	All projects and plans developed by the Provincial Office of Natural Resources and Environment, the District Office of Natural Resources and Environment, the Provincial Office of Agriculture and Forestry, and the District Office of Agriculture and Forestry address CCA/DRM issues that directly affect the target wetlands	The following plans include the application of CCA/DRM assessment and the application of approaches: - partly progressed (early 2020) draft strategy (five-year roadmap) for the National Ramsar Wetlands Programme of the Lao People's Democratic Republic - Xe Champhone management plan (draft) - Beung Kiat Ngong management plan (updated) - Integrated Spatial Plan of Champhone	70%	MS	No local plans provided for the application of CCA/DRM assessment approaches At least one national plan should have been provided for the application of CCA/DRM assessment approaches Follow ups needed to get draft plans and strategies

Appendix 4. Results matrix showing achievements at the end and terminal evaluation observations (progress towards achieving project objectives and outcomes)

Results chain	Indicators	Baseline	End of project target	Achievements to date (May 2022)	Implementation status (%)	Terminal evaluation rating	Justification for rating
Objective: to reduce climate change vulnerability of communities and the fragile wetland ecosystems upon which they depend							
				District (draft, Ministry of Natural Resources and Environment) - Twelve government partner agencies' activity plans (funded through LOAs with FAO-CAWA between 2016 and 2021) have adaptation measures incorporated - Small-scale site management plans developed in Xe Champhone and Beung Kiat Ngong for FCZs, wetland reserves and associated dry season water use plans (District Office of Agriculture and Forestry, District Office of Natural Resources and Environment, Provincial Office of Agriculture and Forestry LOAs from 2019 to 2020) and for five ecotourism development sites in Xe Champhone (Tétraktys	80%		

Results chain	Indicators	Baseline	End of project target	Achievements to date (May 2022)	Implementation status (%)	Terminal evaluation rating	Justification for rating
Objective: to reduce climate change vulnerability of communities and the fragile wetland ecosystems upon which they depend							
	<p>Number of institutions adopting participatory CCA and DRM planning and M&E in the wetlands</p> <p>perception of effectiveness of institutional coordination at the national level in support of CCA</p>	<p>At least one national plan includes the application of CCA/DRM assessment approaches</p> <p>No baselines</p> <p>Scorecard ratings of respondent (but baseline not conducted)</p>	<p>At least 50% of all other provincial and district plans and projects in the target provinces and districts</p> <p>Beung Kiat Ngong Ramsar site management plan</p> <p>Water allocation and abstraction management plans/rules at district level in the target districts</p>	<p>LOAs from 2017 to 2021)</p> <p>Twelve government agencies (national, provincial and district) adopting CCA, DRM and wetland tools, plans and methods, and field activity plans supported by the CAWA project from 2016 to 2022</p> <p>Project TOC approach and lessons learned on CCA/DRM integration into livelihoods and wetland protection into district, provincial and national planning process</p> <p>Implication of learning from NRM and wetland management with ten government agencies/partners suggests understanding of CCA/DRM/NRM planning and implementation tools</p>	80%		

Results chain	Indicators	Baseline	End of project target	Achievements to date (May 2022)	Implementation status (%)	Terminal evaluation rating	Justification for rating
Objective: to reduce climate change vulnerability of communities and the fragile wetland ecosystems upon which they depend							
			<p>At least five national plans related to NRM and agricultureⁱ</p> <p>Provide application of CCA/DRM assessment approaches</p> <p>Participatory CCA/DRM planning and M&E is used in two other districts within the provinces and for two other wetlands nationally</p> <p>The District Office of Natural Resources and Environment and the District Office of Agriculture and Forestry in four districts using participatory CCA/DRM</p> <p>Seventy percent of members of the institutions targeted for improved institutional coordination have favourable perceptions of the</p>	<p>The project supported various trainings, guidelines development, management plan preparation exercises, PPC meeting between provincial and district agencies, data collection exercises related to flood risk review and DRM; early warning data collection and analysis helped to improve coordination and subsequent results of improved coordination, e.g. set up of institutional planning and implementation coordination mechanism, improved coordination and delivery after these activities and observation of improved integration of provincial and district planning and implementation activity into the project,</p>			

Results chain	Indicators	Baseline	End of project target	Achievements to date (May 2022)	Implementation status (%)	Terminal evaluation rating	Justification for rating
Objective: to reduce climate change vulnerability of communities and the fragile wetland ecosystems upon which they depend							
			effectiveness of the coordination	improved national-level coordination and in provincial/district governor's offices indicates understanding of importance on the effectiveness of coordination			
Outcome 4: effective M&E and sharing of knowledge, lessons learned and activity visibility to verify project results and impact	<p>Outcome Indicator 4.1: system developed and implemented for monitoring, dissemination of results, knowledge and lessons learned</p> <p>Outcome Indicator 4.2: number of M&E workshops and monitoring missions organized</p> <p>Outcome Indicator 4.3: number of awareness /knowledge sharing events organized</p>	No system No baselines	System developed is effective for M&E and knowledge sharing	<p>System developed, maintained and continuously updated; data collection and documentation of lessons learned is ongoing and expected to be completed within the extended six months</p> <p>Progress reports (PIRs, PPRs) submitted</p> <p>Mid-term and final evaluations conducted</p> <p>Two M&E workshops organized; FAO Representative visited four times, Lead Technical Officer two</p>	75%	MS	<p>Still more awareness generating and visibility increasing activities needed</p> <p>The M&E system needs to be implemented effectively</p> <p>FAO and United Nations channels could be used to disseminate lessons learned</p>

Results chain	Indicators	Baseline	End of project target	Achievements to date (May 2022)	Implementation status (%)	Terminal evaluation rating	Justification for rating
Objective: to reduce climate change vulnerability of communities and the fragile wetland ecosystems upon which they depend							
	<p>number of people following online project content on websites and portals</p> <p>number of knowledge sharing products</p>			<p>times, FAO Regional Office for Asia and the Pacific one visit to sites</p> <p>World Water Day six, World Environment Day five, World Food Day two and Assessment of Agricultural Innovation Systems one</p> <p>One thousand five hundred seventy-six people following project online portal</p> <p>Thirty-five technical reports, 18 activity reports, eight news/stories, 11 videos and four information, education and communication materials</p>			
Output 1.1: pilot method-logical tool developed for participatory climate change vulnerability of disaster risk assessment in wetlands	Output Indicator 1.1.1: state of development and use of pilot methodological tool for participatory climate change vulnerability of disaster risk	The Climate Change Adaptation and Mitigation Methodology has been used in the Xe Champhone, Beung Kiat Ngong and Siphandone wetlands and Xe	Participatory climate change vulnerability of disaster risk assessment tool available in Lao language for national replication, based on test and refinement at two wetland sites	A climate change vulnerability assessment tool and vulnerability assessment process has been developed, tested and validated. The vulnerability assessment tool was	100%		

Results chain	Indicators	Baseline	End of project target	Achievements to date (May 2022)	Implementation status (%)	Terminal evaluation rating	Justification for rating
Objective: to reduce climate change vulnerability of communities and the fragile wetland ecosystems upon which they depend							
	assessment in wetlands	Pian (but not in a participatory manner there), and by the Mekong Adaptation and Resilience to Climate Change initiative in Phou Hin Poun		originally developed in 2017 and validation was undertaken through initial test missions and then further validated during the full vulnerability assessment process conducted from late 2017 to mid-2018. In May 2018, the section for CCA planning was updated by the IUCN and incorporated into the vulnerability assessment guidelines document, i.e. Chapter 8, Adaptation Planning, in Guidance Notes for Rapid Climate Change Vulnerability and Disaster Risk Assessment for the CAWA and Mekong WET Projects, draft 0.7 and subsequently translated into Lao (Appendix 1). In July 2018, the full vulnerability assessment process (following			

Results chain	Indicators	Baseline	End of project target	Achievements to date (May 2022)	Implementation status (%)	Terminal evaluation rating	Justification for rating
Objective: to reduce climate change vulnerability of communities and the fragile wetland ecosystems upon which they depend							
				implementation in all Mekong countries) was reviewed by the IUCN prior to the Indo-Burma Ramsar Regional Initiative meeting with contributions from the IUCN from the Lao People's Democratic Republic; no additional changes were made, and it is considered the final review/validation of the vulnerability assessment tool			
Output 1.2: effective training ⁱⁱ programme on climate change/CCA vulnerability of disaster risk assessment in wetlands	Output Indicator 1.2.1: number of stakeholders trained in participatory climate change vulnerability and DRM (CCA Outcome 2.1, Indicator 5)	None ⁱⁱⁱ	Totals: • fifteen Provincial Office of Natural Resources and Environment and 15 Provincial Office of Agriculture and Forestry staff in each target province (=60) • fifteen District Office of Natural Resources and Environment and 15 District Office of Agriculture and Forestry staff in each of the three districts surrounding the	Training programme includes: - climate change vulnerability assessment training for local government staff - community awareness sessions on climate change and vulnerability - CCA planning workshop for local government staff and village leaders - CCA planning workshop for community members	100%		No pre- and post-training assessment conducted to analyse impact of training activities Only completing number of target is not enough but need assure if quality change is made or not.

Results chain	Indicators	Baseline	End of project target	Achievements to date (May 2022)	Implementation status (%)	Terminal evaluation rating	Justification for rating
Objective: to reduce climate change vulnerability of communities and the fragile wetland ecosystems upon which they depend							
			wetlands (=60) • four hundred villagers, of which 200 are female (20 villagers in each of the 20 villages)	- wetland management training for site managers and community members Staff from provinces (Champasak and Savannakhet): 30 Staff from districts (Pathoumphone and Champhone): 22 Community members from both sites (24 villages): 540 Total of 592			
Output 1.3: participatory vulnerability of disaster risk assessments carried out in the Xe Champhone and Beung Kiat Ngong wetlands	Output Indicator 1.3.1: number of participatory vulnerability of disaster risk assessments carried out ^{iv} in the wetland communities, addressing aspects of wetlands, wetland-based livelihoods and gender	Vulnerability of disaster risk assessments have been carried out in Xe Champhone and Beung Kiat Ngong, focusing on wetland habitats and species and, to some degree, livelihoods	By Year 2, one in each of the 20 key villages including focus on gender differences in vulnerability	Participatory vulnerability assessment on species, habitats and villages with gender focus conducted in a total 24 target villages (16 villages in Xe Champhone and eight villages in Beung Kiat Ngong) between August and September 2017	100%		

Results chain	Indicators	Baseline	End of project target	Achievements to date (May 2022)	Implementation status (%)	Terminal evaluation rating	Justification for rating
Objective: to reduce climate change vulnerability of communities and the fragile wetland ecosystems upon which they depend							
				Completed under Xe Champhone management planning meetings and participatory validations, plus review and validation of the CAWA TOC			
Output 1.4: recommendations for appropriate adaptation measures based on analyses of climate change-related issues affecting the target wetlands (including traditional knowledge)	Output Indicator 1.4.1: number of studies generated ^v on climate change-related issues affecting the target wetlands, including analysis of gender dimensions	See endnote	Reports available on the following key topics available in both English and the Lao languages: ^{vi} <ul style="list-style-type: none"> - allowable rates and locations of water extraction for irrigation - spatial priorities for wetland re-opening - acceptable fish off-take levels, timing of closed seasons, locations of no-take areas - spatial priorities and technical recommendations for improved watershed management - sustainable limits and locations for grazing 	Thirteen studies completed (end of project target is based on the indicative list of nine key topics): <ol style="list-style-type: none"> 1. invasive plants, Xe Champhone Ramsar Site, Savannakhet Province, the Lao People's Democratic Republic by the CAWA project team, December 2016 (English and Lao) 2. gender report, Xe Champhone Ramsar site, the Lao People's Democratic Republic by the IUCN, January 2017 (English and Lao) 3. fisheries survey report, Xe Champhone Ramsar site, Savannakhet Province, the Lao People's 	100%		

Results chain	Indicators	Baseline	End of project target	Achievements to date (May 2022)	Implementation status (%)	Terminal evaluation rating	Justification for rating
Objective: to reduce climate change vulnerability of communities and the fragile wetland ecosystems upon which they depend							
			<ul style="list-style-type: none"> - integrated pest management options - measures for management of invasive alien species - appropriateness for controlled burning to protect valuable wetland habitats - Protection measures for key wetland species (e.g. crocodile, turtles). 	<p>Democratic Republic by the CAWA project team, February 2017 (English)</p> <p>4. institutional mechanisms for wetlands governance in the Lao People's Democratic Republic in the context of the Ramsar convention for CAWA by Rita Gebert, April 2017 (English)</p> <p>5. hydrological assessment of the Xe Champhone and Beung Kiat Ngong wetlands by the International Water Management Institute, September 2017 (English and Lao)</p> <p>6. identification of spatial priorities for the re-opening of wetlands to maintain the water flow required for ecological functioning, biological connectivity and habitat maintenance by the IUCN, December 2017 (English and Lao)</p>			

Appendix 4. Results matrix showing achievements at the end and terminal evaluation observations (progress towards achieving project objectives and outcomes)

Results chain	Indicators	Baseline	End of project target	Achievements to date (May 2022)	Implementation status (%)	Terminal evaluation rating	Justification for rating
Objective: to reduce climate change vulnerability of communities and the fragile wetland ecosystems upon which they depend							
				7. ecotourism development of Xe Champhone, tourism assessment by Tétraktys, May 2018 (English) 8. key income sources of households in Xe Champhone wetlands by Dr Lilao Bouapao, June 2018 (English and Lao); 9. assessment of human-wildlife conflict issues, ecotourism and management implications for the rhesus macaque population of the Monkey Forest, Champhone, Savannakhet Province, the Lao People's Democratic Republic by the IUCN, October 2018 (English and Lao); 10. Assessment of the distribution, status and conservation priorities of freshwater turtles from Xe Champhone and Beung Kiat Ngong			

Results chain	Indicators	Baseline	End of project target	Achievements to date (May 2022)	Implementation status (%)	Terminal evaluation rating	Justification for rating
Objective: to reduce climate change vulnerability of communities and the fragile wetland ecosystems upon which they depend							
				Ramsar sites, the Lao People's Democratic Republic by the IUCN, December 2018 (English and Lao); 11. developing priorities for landscape restoration to support improved Xe Champhone wetland and watershed management in Champhone District, Savannakhet Province, the Lao People's Democratic Republic by the IUCN, December 2018 (English and Lao); 12. erosion study by the integrated water resources management (International Water Management Institute), July 2019 (English). 13. rapid field assessment to develop NTFPs and aquatic resources value adding opportunities and improve resource management for communities around			

Results chain	Indicators	Baseline	End of project target	Achievements to date (May 2022)	Implementation status (%)	Terminal evaluation rating	Justification for rating
Objective: to reduce climate change vulnerability of communities and the fragile wetland ecosystems upon which they depend							
				the Xe Champhone Ramsar site by the IUCN, December 2020 (English).			
Output 2.1 Planning and inter-sectoral coordination frameworks for the two sites promoting CCA measures.	Output Indicator 2.1.1. Numbers of plans that incorporate CCA considerations.	No specific planning for wetlands introducing CCA.	<ul style="list-style-type: none"> - 1 CCA-friendly territorial land use plan (LUP) per wetland - 1 CCA-friendly financial investment plan per wetland - 1 specific CCA plan per wetland - all infrastructure, agriculture and rural development plans in target districts incorporate wetland-focused CC vulnerability assessment with corresponding CCA measures. 	<ul style="list-style-type: none"> - Integrated Spatial Plan of Champhone District (final draft - Ministry of Natural Resources and Environment); -Beung Kiat Ngong Ramsar site management plan 2019-2023 (updated – Lower Mekong Basin Wetland Management and Conservation project); - Xe Champhone Ramsar site management plan (ongoing, CAWA). - 12 government partner agencies' activity plans (funded through LOAs with FAO-CAWA) have adaptation measures incorporated. 	75%		Endline KAP/qualitative survey to be conducted within the last 6 months of the project from July to December 2022.
		Meetings/year					

Results chain	Indicators	Baseline	End of project target	Achievements to date (May 2022)	Implementation status (%)	Terminal evaluation rating	Justification for rating
Objective: to reduce climate change vulnerability of communities and the fragile wetland ecosystems upon which they depend							
	Output Indicator 2.1.2. Frequency of meeting of coordination mechanisms that embrace CCA in target wetlands and buffer zones.	Current meetings do not address CCA	1 Ramsar National Committee meets annually; 2 provincial Ramsar committees meet at least 2 times annually Site specific wetland stakeholder committees meet at least two times annually	Total of 25 meetings organized.	55%		
Output 2.2: Capacities of water/natural resources/wetlands user groups strengthened to apply effective governance of NRM use and management	Output indicator 2.2.1: Capacities of user and governance groups ^{vii}	Village clusters (<i>khet</i>) or "development clusters" (<i>khumban</i>) promote development and local governance, and have enforcement (militia) arms. Village councils are responsible for community resources such as village protection or production forests.	User and governance groups covering all key areas ^{viii} of target wetlands have capacities ^x to apply effective governance, with a specific focus on adaptation and resilience issues and a gender focus	Capacity building and on-the-job trainings through LOA activities for local user and governance groups: - wetland demarcation committee - wetland clearing groups - water use and management committees - weir management committee - FCS committees - fisherfolk catch	90%		The project team mentioned that end line survey will be conducted within the last 6 months from July to December 2022.

Appendix 4. Results matrix showing achievements at the end and terminal evaluation observations (progress towards achieving project objectives and outcomes)

Results chain	Indicators	Baseline	End of project target	Achievements to date (May 2022)	Implementation status (%)	Terminal evaluation rating	Justification for rating
Objective: to reduce climate change vulnerability of communities and the fragile wetland ecosystems upon which they depend							
		<p>Village leaders play important roles in managing small-scale irrigation, enforcing fishing rules and allocating land.</p> <p>Villager groups include:</p> <ul style="list-style-type: none"> - water user groups in charge for maintenance and monitoring irrigation activities and equipment. - Ban Houmuang (Xe Champhone) fisheries group, following the installation of FCZs. - Ban Kiat Ngong village has a malva nut collecting group, in charge of monitoring nut harvesting. 		<p>monitoring groups</p> <ul style="list-style-type: none"> - tourism loop committee and 5 local site ambassadors 			

Results chain	Indicators	Baseline	End of project target	Achievements to date (May 2022)	Implementation status (%)	Terminal evaluation rating	Justification for rating
Objective: to reduce climate change vulnerability of communities and the fragile wetland ecosystems upon which they depend							
	Output Indicator 2.2.2: Number of villages in wetland and buffer areas covered by effective governance groups and water user groups.x	Local governance groups do not currently address wetland management and do not specifically provide for CCA measures	All target villages have governance groups and wetland user group with rules, providing for adaptation considerations, applied and adhered to.	Across both sites: - wetland demarcation committee covering 13 villages in Xe Champhone; - water use and management committees in 14 villages in Xe Champhone and Beung Kiat Ngong; - fisheries committees in 21 villages in Xe Champhone and Beung Kiat Ngong; - veterinary network with 11 clusters covering 44 villages in Xe Champhone ; and 4 clusters covering 8 villages in Beung Kiat Ngong; - Xe Champhone tourism loop committee comprising 8 villages involved with the 5 ecotourism target sites.	100%		

Results chain	Indicators	Baseline	End of project target	Achievements to date (May 2022)	Implementation status (%)	Terminal evaluation rating	Justification for rating
Objective: to reduce climate change vulnerability of communities and the fragile wetland ecosystems upon which they depend							
Output 2.3: Direct investment in CCA strategies	Output Indicator 2.3.1: numbers of households (male and female led) benefiting from one or more forms of direct investment in CCA ^{xi}	NA	1600 households	Direct investments in CCA include: - demarcation of wetlands (Nongkan-Nongmaehang-Nongdern, Ta Loung, Kout Khaen Neua and Kout Khaen wetlands as 4 separate unified wetland reserves in 13 villages in Xe Champhone;	100%		<p>The project end line survey is planned to conduct within the last 6 months July-December 2022.</p> <p>Fish hatchery in Xonnabuly District was newly constructed but still work remained to begin fish raising and hatching.</p> <p>Construction of dam in Keangkham reservoir of Phakka village was not constructed and rising of height of Kaengkokdong village of Pathoumphone District and in Pathoumphone District was not done yet. All these three are indicated as complete in the PIR.</p>

Results chain	Indicators	Baseline	End of project target	Achievements to date (May 2022)	Implementation status (%)	Terminal evaluation rating	Justification for rating
Objective: to reduce climate change vulnerability of communities and the fragile wetland ecosystems upon which they depend							
				<ul style="list-style-type: none"> - establishment of dry season water storage in 2 villages in Beung Kiat Ngong; - Weir (Nongdern) spillway and dyke repairing in 3 villages in Xe Champhone; - support to improve wells for drinking water supply in 2 villages in Beung Kiat Ngong; - physical re-opening of wetlands and management of invasive species in 14 villages in Xe Champhoe and Beung Kiat Ngong; - establishment of nurseries for reforestation in 1 village (at District Office of Natural Resources and Environment and District Office of Agriculture and Forestry offices) in Xe Champhone; - FCZs in 21 villages in Xe Champhone and Beung Kiat Ngong; 			

Results chain	Indicators	Baseline	End of project target	Achievements to date (May 2022)	Implementation status (%)	Terminal evaluation rating	Justification for rating
Objective: to reduce climate change vulnerability of communities and the fragile wetland ecosystems upon which they depend							
				<ul style="list-style-type: none"> - establishment of a hatchery in 3 villages in Xe Champhone and 2 villages in Beung Kiat Ngong; - veterinary networks covering 52 villages in Xe Champhone and Beung Kiat Ngong; - Construction and investment in ecotourism sites involving 8 villages in XC. <p>Total of around 6 363 households are benefiting from one or more forms of direct investment in CCA.</p>			
	Output Indicator 2.3.2: number of villages with value-adding facilities for NTFPs established, benefiting men and women	NA	10 Villages	24 villages where NTFPs and wetland resources value adding activities (handicraft, fish processing and household products) are benefiting men and women, implemented under LOAs of: District Office of Natural Resources and Environment Champhone, PAFO-LFS	100%		

Results chain	Indicators	Baseline	End of project target	Achievements to date (May 2022)	Implementation status (%)	Terminal evaluation rating	Justification for rating
Objective: to reduce climate change vulnerability of communities and the fragile wetland ecosystems upon which they depend							
				Savannakhet, Tétraktys, LWU Savannakhet and LWU Pathoumphone.			
	Output Indicator 2.3.3: number of villages with visitor facilities for ecotourism established benefiting men and women	NA	10 Villages	Total 8 villages which are covered by the 5 ecotourism sites.	80%		Activities in the ecotourism site were ongoing but not completed.
	Output Indicator 2.3.4: number of semi-natural reservoirs established benefiting men and women	2 small/medium reservoirs	4 small/medium reservoirs	10 small/medium reservoirs: In XC: 1. Nongdern lake 2. Nongkan wetland 3. Nongmaehang wetland 4. Koutkhaen Tai wetland 5. Koutkhaen Neua wetland 6. Taloung wetland 7. Laonard community fish pond 8. Phaleng community fish pond In BKN: 9. Phapho water storage 10. Phakkha water storage	70%		Construction of dam in Pakka villages and height increment of existing dam/dyke in Kaengkokdong village and Pakse village were not done so need to work on them (see pictures at the end of this report).

Appendix 4. Results matrix showing achievements at the end and terminal evaluation observations (progress towards achieving project objectives and outcomes)

Results chain	Indicators	Baseline	End of project target	Achievements to date (May 2022)	Implementation status (%)	Terminal evaluation rating	Justification for rating
Objective: to reduce climate change vulnerability of communities and the fragile wetland ecosystems upon which they depend							
	Output Indicator 2.3.5: Area of riparian forest replanted (ha)	NA	200ha	84.5 ha	42%		Below target
Output 2.4: Strengthened individual capacities through effective programmes and innovation systems to support CC resilience strategies	Output Indicator 2.4.1: # men and women with increased knowledge and awareness to apply CC-resilient wetlands management, CC-resilient agricultural practices and/or non-agricultural livelihood support options	Knowledge and awareness TBD through baseline KAP surveys and learning needs assessment.	50% of men and women's population in project target area	At least 2,501 men and women trained by the project to apply CC-resilient wetlands management, agricultural practices and non-agricultural livelihood support options. (NB: Output indicator 2.4.1 proposed to be adjusted to 'Number of men and women trained to apply learnings).	70%		Below target Due to the absence of a baseline (no KAP surveys done at the beginning of the project), the indicator will be limited to number of men/women trained and qualitatively (the application of knowledge) and results. The project end line survey should generate more information on the effectiveness of these activities.
Output 2.5: Early warning, disaster risk reduction and early recovery measures and systems in place	Output Indicator 2.5.1: Effectiveness of early warning systems in 20 target villages, as measured by promptness of receipt of, and effectiveness	Early warning messages delivered on time to 10% of all events in year prior to project start. Effective action taken by 5% of affected villagers	Early warning messages delivered on time to 100% of all events in target villages in Year 5, and effective action taken in response by 50% of all affected villagers	Early warning systems for water resources, flood and fish populations functional and effective during flooding period, thanks to project establishment and	90%		

Results chain	Indicators	Baseline	End of project target	Achievements to date (May 2022)	Implementation status (%)	Terminal evaluation rating	Justification for rating
Objective: to reduce climate change vulnerability of communities and the fragile wetland ecosystems upon which they depend							
Output 3.1: Methodological guidelines for integration of CCA and DRM into local and national plans	of response to, early warning messages			operation of water level and water quality monitoring systems in Xe Champhone and Beung Kiat Ngong.			
	Output Indicator 3.1.1: Numbers of methodological guidelines used in planning instruments at different levels	None	Guidelines used in: - Provincial and district plans and new proposals. - Beung Kiat Ngong Ramsar site management plan - Water allocation and abstraction management plans/rules at district level	- guidance notes for rapid climate change vulnerability and disaster risk assessment for the CAWA and Mekong WET projects - draft national guideline for management of Ramsar wetlands in the Lao People's Democratic Republic (under preparation) - draft national strategy (road map) for the Lao People's Democratic Republic Ramsar programme (pending in the Department of Environment)	50%		-Review of plans will be done within the last 6 months from July to December 2022. -Additional meetings within the last 6 months from July to December 2022 will be updated.
Output 3.2: Effective learning programme for community, district and provincial stakeholders in	Output Indicator 3.2.1: Numbers of stakeholders effectively trained in participatory	None	- 10 Provincial Office of Natural Resources and Environment and 10 PAFO staff in Savannakhet and in Champassack	Trainings conducted include: CCA Planning (2018–2019) - CCA planning workshop for	100%		

Results chain	Indicators	Baseline	End of project target	Achievements to date (May 2022)	Implementation status (%)	Terminal evaluation rating	Justification for rating
Objective: to reduce climate change vulnerability of communities and the fragile wetland ecosystems upon which they depend							
planning and M&E for participatory CC adaptation and disaster management.	adaptation and DRM planning and M&E		<ul style="list-style-type: none"> - 10 District Office of Natural Resources and Environment and 10 DAFO staff in each of the 3 districts surrounding the wetlands - 50 community members from the surrounding wetlands 	<p>government staff and village heads</p> <ul style="list-style-type: none"> - CCA planning workshop for communities <p>Total of 170 people:</p> <ul style="list-style-type: none"> •18 provincial staff •16 district staff •136 Villagers <p>Additional trainings (2020–2022):</p> <ul style="list-style-type: none"> -Flood mapping (Provincial Office of Natural Resources and Environment Savannakhet LOA) - Ministry of Natural Resources and Environment flood risk early warning data collection and analysis cross-department activity assessment (DCC, Ministry of Natural Resources and Environment workshop concept) -Ecotourism, conservation and CCA 			

Results chain	Indicators	Baseline	End of project target	Achievements to date (May 2022)	Implementation status (%)	Terminal evaluation rating	Justification for rating
Objective: to reduce climate change vulnerability of communities and the fragile wetland ecosystems upon which they depend							
Output 3.3: Institutional mechanisms for intersectoral coordinating climate change resilience in wetlands strengthened at national level	Output Indicator 3.3.1: Existence and frequency of meeting of coordination mechanisms for climate change resilience in wetlands	Existing coordination mechanisms: - National Committee for Wetland Management and Ramsar Convention - National, Provincial, District and Village Disaster Committee (district and village levels not operational in the target areas) - National Steering Committee on Climate Change	Revise members of committees to integrate new sectors into wetlands management.	Revision of members of the following Ramsar wetlands management committees: - National Ramsar Committee - National Ramsar Secretariat - National Ramsar Focal Points National Consultation Workshop on Eco-Friendly Water Management for Sustainable Wetland Agriculture led by FAO, on the 6th of December 2019. CAWA contribution with a presentation on 'Lessons learned on integrated wetland livelihood and wetland conservation practice in the field'. Progress on DRM early warning coordination with the Ministry of Natural Resources and Environment Climate Change Committee (CCC) workshop	50%		Need to focus on the extended period accomplish targeted activities.

Appendix 4. Results matrix showing achievements at the end and terminal evaluation observations (progress towards achieving project objectives and outcomes)

Results chain	Indicators	Baseline	End of project target	Achievements to date (May 2022)	Implementation status (%)	Terminal evaluation rating	Justification for rating
Objective: to reduce climate change vulnerability of communities and the fragile wetland ecosystems upon which they depend							
				concept (pending implementation).			
Output 4.1: Reporting and evaluations implemented effectively	Output Indicator 4.1.1: Number of progress reports (PPR and PIR) submitted	0	12	11 (and PIR) submitted. The final one covering the period between December 2021 and project closure	90%		Some activity status information in the PIRs were found wrong on the ground so need to verify all activities' status. Should address all recommendations of the mid-term review (MTR). Below target Below target Below target
	Output indicator 4.1.2: mid-term and final evaluations implemented	0	2	1.5. Some of the recommendations implemented.	75%		
Output 4.2: M&E system established and implemented to monitor activities, outputs and outcomes effectively	Output indicator 4.2.1: Number of M&E workshops organized	0	3	2 workshops	66%		
	Output indicator 4.2.2: Number of supervision and backstopping missions organized	0	10	7 missions. FAO-Representative 4 Legal Technical Officer 2 FAO Regional Office for Asia and the Pacific 1	70%		
Output 4.3. Knowledge management, sharing and communication outputs are delivered effectively	Output Indicator 4.3.1: Number of awareness/knowledge-sharing events and activities organized and involved	0	18	14 events: World Wetlands Day 6 World Environment Day 5 World Food Day 2 Assessment of Agricultural Innovation Systems 1	78%		

Results chain	Indicators	Baseline	End of project target	Achievements to date (May 2022)	Implementation status (%)	Terminal evaluation rating	Justification for rating
Objective: to reduce climate change vulnerability of communities and the fragile wetland ecosystems upon which they depend							
	Output Indicator 4.3.2: Number of people following project online content on websites, portals and social media platforms	0	2 000	1 576 people visited the online portal.	75%		Below target
	Output Indicator 4.3.3: Number of knowledge-sharing products (publications, news, stories, videos, information, education and communication materials)	0	75	73 technical reports and 35 studies 18 other activity reports 4 news/stories 12 videos 4 information, education and communication materials	70%		Below target

Notes:

ⁱ This includes the 15-year Ministry of Natural Resources and Environment Action Plan, the National Adaptation Programme of Action, the climate change subsector working group strategy and the National Strategy on Environment and Climate Change Education and Awareness.

ⁱⁱ Effectively trained means good learning practices for effective capacity development, based on the FAO Learning Module 3 on Effective Learning. This includes action-oriented, peer-to-peer adult learning, such as farmer field schools.

ⁱⁱⁱ A learning needs assessment will be carried out in Year 1 at the Provincial Office of Natural Resources and Environment, the Provincial Office of Agriculture and Forestry, the District Office of Natural Resources and Environment, the District Office of Agriculture and Forestry and at the village level to generate a baseline. This baseline will be tracked using KAP methodology.

^{iv} This is by district implementation teams (District Office of Natural Resources and Environment, District Office of Agriculture and Forestry, communities) with technical and facilitation support from provincial project units.

^v This is with support from external consultants hired by the project, working with national and regional institutions.

^{vi} This is an indicative list, subject to ongoing review on the basis of needs analyses and discussions with local stakeholders.

^{vii} Inspired by FAO Learning Module on Organizational Development and Analysis (FAO, 2023c).

^{viii} Those parts of the target wetlands with highest levels of threat and/or vulnerability.

^{ix} Formal groups have clearly defined mandates and rules, and meet regularly: formal and informal groups are considered by community members (in focus group discussions) to be effective and inclusive of different gender and socioeconomic groups.

^x Village clusters (*khet*), "development clusters" (*khumban*), village councils and resource user groups.

^{xi} For example, climate change-resistant livestock and cropping materials, small-scale irrigation equipment, improved veterinary facilities, access to wells with improved climate change resilience, pilot aquaculture projects, rainwater harvesting and water storage equipment.

Appendix 5. Co-financing table

Sources of co-financing*	Name of co-financer	Type of co-financing	Amount confirmed at CEO endorsement/approval	Actual amount materialized on 30 June 2022	Actual amount materialized at mid-term or closure (confirmed by the review/Evaluation Team)	Expected total disbursement by the end of the project
National government	Ministry of Natural Resources and Environment	In-kind	500 000	150 000	500 000 Staff costs, office costs contributions	500 000
National government	Ministry of Agriculture and Forestry	In-kind	500 000	150 000	500 000 Staff costs, office costs contributions	500 000
Government	LWU	In-kind			Exact figures unknown Staff costs, office costs contributions	
Bilateral aid agency	KfW	Cash	2 187 380	200 000	200 000 Unknown if further complementary contributions will/have taken place	
Other multilateral agency	World Bank	Grant	8 430 000	7 000 000	7 000 000 Includes Integrated River Basin project	7 000 000
Other multilateral agency	International Water Management Institute	Grant	600 000	USD 75 000 (Climate Change, Agriculture and Food Security in 2016) + USD 50 000 (Climate Change, Agriculture and Food Security in 2017) + USD 20 000 in 2018	145 000 Unknown if further complementary contributions will/have taken place	

Appendix 5. Co-financing table

Sources of co-financing*	Name of co-financer	Type of co-financing	Amount confirmed at CEO endorsement/approval	Actual amount materialized on 30 June 2022	Actual amount materialized at mid-term or closure (confirmed by the review/Evaluation Team)	Expected total disbursement by the end of the project
Other multilateral agency	IUCN	Grant	2 400 000	615 000 (German Ministry for the Environment, Nature Conservation, and Nuclear Safety) 280 000 (KfW) 30 000	925 000 Supported research programme Unknown final amount disbursed (ongoing)	
Other multilateral agency	FAO	Grant	750 000	200 000	750 000	
TOTAL			15 367 380	8 770 000	9 270 000	

Source: FAO. 2022. *Project implementation report*. September 2022.

Notes: * Sources of co-financing may include: bilateral aid agencies; foundations; the GEF agency; the local government; the national government; civil society organizations; other multilateral agencies; the private sector; and beneficiaries.

Some of the organizations contributing complementary funding – such as the LWU – made contributions. However, these were not covered in a letter on co-financing, and it is difficult to obtain accurate figures for these contributions. Some of these initiatives are ongoing, and it is uncertain as to the final amounts disbursed by the end of this project.

The IUCN was involved in various studies related to wetlands and in preparation of management plans of wetlands, but they were funded by the CAWA project for performing some of those activities so they were also service providers rather than purely co-financers.

Appendix 6. GEF evaluation criteria rating table and rating scheme

GEF criteria/subcriteria	Rating	Summary comments
Strategic Relevance		
Overall strategic relevance	S	Relevant to the country's need
1.1 Alignment with GEF and FAO strategic priorities	S	It is aligned with GEF and FAO strategic priorities
1.2 Relevance to national, regional and global priorities and beneficiary needs	S	Relevant to national, regional and global priorities and beneficiary needs
1.3 Complementarity with existing interventions	S	Contributes to Government of the Lao People's Democratic Republic effort to address Ramsar sites and other wetland sector problems
Effectiveness		
1. Overall assessment of project results	S	Achieved about 80% of the target
1.1 Delivery of project outputs	S	Few activities were not completed and few yet to initiate; final-level targets not fully achieved; only about 80% of final-level targets achieved
1.2 Progress towards outcomes and project objectives	MS	Progress made
Outcome 1	S	Progress made
Outcome 2	S	Progress made
Outcome 3	S	Progress made
Outcome 4	S	Progress made with minor shortcomings
Overall rating of progress towards achieving objectives/outcomes	S	Some progress made (80% activities accomplished) but need to follow up ongoing activities and also initiation of a few activities
Efficiency		
Efficiency	MS	Efficient in selection of species of vegetables and livestock but some improvement needed to implement remaining activities
Sustainability of project outcomes		
i. Overall likelihood of risks to sustainability	ML	Relevant staff trained, farmers trained and commitment made by relevant agency verbally; but government is more interested in rice cultivation and

Appendix 6. GEF evaluation criteria rating table and rating scheme

GEF criteria/subcriteria	Rating	Summary comments
		pesticides and chemical fertilizer used in rice field may harm wetland biodiversity; limited human resources with the provincial and district government to continue monitoring and provide technical assistance
ii. Financial risks	ML	Revolving fund created but need to train villagers on management of the fund; also need to generate financial support to continue project results
iii. Sociopolitical risks	ML	Restructuring of ministries and staff turnover took place at the initial phase of the project
iv. Institutional governance risks	ML	Relevant local government institute is involved in implementation their capacity is enhanced and they committed to continue results but limited human resources could limit their support.
v. Environmental risks	ML	With the arrangements it is unlikely but if any climate issues appear then could not say; also government's priority to rice cultivation could raise risks to wetland environment; flood could also affect results of the project
vi. Catalysis and replication	ML	Government agencies interested to replicate lessons from this project; similarly, FAO is also interested to continue lesson in these areas in big magnitude
Factors affecting performance		
Project design and readiness	S	Appropriate but still some room for improvement; indicators need to be improved and should have included all hydrologically and biologically related wetlands
Quality of project implementation	S	If COVID-19 restrictions, flood of 2020, staff turnover in government side, slow procurement are considered then implementation is satisfactory
Quality of project implementation by FAO (Budget Holder, Lead Technical Officer, Project Task Force, etc.)	S	Mission from Regional Office and also Country Office was limited due to the COVID-19 pandemic; synergy building was limited
Project oversight (project steering committee, project working group, etc.)	MS	Project steering committee contributed to policy-level issues and also

GEF criteria/subcriteria	Rating	Summary comments
		supporting in addressing immediate feedback to address issues faced by the project: project steering committee was not able to address delays in the initial phases of the project
Quality of project execution	MS	Delay in recruitment of staff, change in structure of Ministry, staff turnover and long process of approval from Ministry affected programme in the initial years; after changing in implementation modality it improved
Project execution and management (PMU and executing partner performance, administration, staffing, etc.)	S	Delay in recruitment of staff, staff turnover and delay in procurement affected project implementation
Financial management and co-financing	MS	There were no serious financial issues in the project. Reasonable levels of co-financing were realized but these fell short of originally anticipated amounts
Project partnerships and stakeholder engagement	S	Would have been better if synergy or partnership was made with more institutes and other organizations working in wetland of the Lao People's Democratic Republic.
Communication, knowledge management and knowledge products	S	Still room for improvement by establishing link with other wetland projects and also using more awareness activities through various means targeting both village level as well as national level; need more awareness activities and also sharing of lessons through United Nations network
Overall quality of M&E	MS	Indicators need improvement, monitoring was affected during COVID-19 restrictions
M&E design	S	Design is fine, baseline missing and room exists for improvement in indicator
M&E plan implementation (including financial and human resources)	MS	Still room for improvement; M&E was affected during COVID-19 restrictions
Overall assessment of factors affecting performance	MS	Still room for improvement; Issues mentioned above
Cross-cutting issues		
i. Gender and other equity dimensions	S	Could have leadership building programmes; still need more women-focused programmes; awareness generated on gender mainstreaming

GEF criteria/subcriteria	Rating	Summary comments
		and violence and gender rules; women's participation was given priority and were involved in many activities and had gender focused activities also
ii. Human rights issues	NA	No direct human rights programmes but indirectly supports human rights
iii. ESS	S	Supports local environment improvement and also social aspects were taken into consideration
Overall project rating	S	Completing remaining work in the extended period would strengthen the Satisfactory rating

B. Assessing rating

Rating	Description
Highly satisfactory (HS)	Level of outcomes/performance achieved clearly exceeds expectations and/or there were no shortcomings
Satisfactory (S)	Level of outcomes/performance achieved was as expected and/or there were no or minor shortcomings
Moderately satisfactory (MS)	Level of outcomes/performance achieved more or less as expected and/or there were moderate shortcomings
Moderately unsatisfactory (MU)	Level of outcomes/performance achieved somewhat lower than expected and/or there were significant shortcomings
Unsatisfactory (U)	Level of outcomes/performance achieved substantially lower than expected and/or there were major shortcomings
Highly unsatisfactory (HU)	Only a negligible level of outcomes/performance achieved and/or there were severe shortcomings
Unable to assess (UA)	The available information does not allow an assessment of the level of outcome/performance achievements

C. Criteria for rating factors affecting performance

Rating	Description
Highly satisfactory (HS)	There were no shortcomings and quality of design and readiness/project implementation/project execution/co-financing/ partnerships and stakeholder engagement/communications and knowledge management and results exceeded expectations
Satisfactory (S)	There were no or minor shortcomings and quality of design and readiness/project implementation/project execution/co-financing/

Rating	Description
	partnerships and stakeholder engagement/communications and knowledge management and results meet expectations
Moderately satisfactory (MS)	There were some shortcomings and quality of design and readiness/project implementation/project execution/co-financing/ partnerships and stakeholder engagement/communications and knowledge management and results more or less meet expectations
Moderately unsatisfactory (MU)	There were significant shortcomings and quality of design and readiness/project implementation/project execution/co-financing/ partnerships and stakeholder engagement/communications and knowledge management and results were somewhat lower than expected
Unsatisfactory (U)	There were major shortcomings and quality of design and readiness/project implementation/project execution/co-financing/ partnerships and stakeholder engagement/communications and knowledge management and results were substantially lower than expected
Highly unsatisfactory (HU)	There were severe shortcomings in quality of design and readiness/ project implementation/project execution/co-financing/partnerships and stakeholder engagement/communications and knowledge management
Unable to assess (UA)	The available information does not allow an assessment of the quality of design and readiness/project implementation/project execution/ co-financing/partnerships and stakeholder engagement/ communications and knowledge management

D. Monitoring and evaluation design or implementation rating

Rating	Description
Highly satisfactory (HS)	There were no shortcomings and quality of M&E design or M&E implementation exceeded expectations
Satisfactory (S)	There were no or minor shortcomings and quality of M&E design and implementation meet expectations
Moderately satisfactory (MS)	There were some shortcomings and quality of M&E design and implementation meet expectations
Moderately unsatisfactory (MU)	There were significant shortcomings and quality of M&E design and implementation somewhat lower than expected
Unsatisfactory (U)	There were major shortcomings and quality of M&E design and implementation substantially lower than expected
Highly unsatisfactory (HU)	There were severe shortcomings in quality of M&E design or M&E implementation
Unable to assess (UA)	The available information does not allow an assessment of the quality of M&E design or implementation

E. Sustainability

Rating	Description
Likely (L)	There is little or no risk to sustainability
Moderately likely (ML)	There are moderate risks to sustainability
Moderately unlikely (MU)	There are significant risks to sustainability
Unlikely (U)	There are severe risks to sustainability
Unable to assess (UA)	Unable to assess the expected incidence and magnitude to risks to sustainability

Appendix 7. Methods used by stakeholder group

Stakeholder groups	Key informant interview	Focus groups	Other (specify)	Key areas of enquiry
FAO and CAWA team	Department of Environment, CAWA FAO, FAO Country Office	-		Overall project information, implementation status, challenges, communications and information dissemination plan, M&E plan, work plan, adaptations made to address challenges, lessons, etc.
Partner/service provider	IUCN	-	-	IUCN's involvement wetland of the Lao People's Democratic Republic, their contribution to CAWA activities
Provincial officials Savannakhet and Champasak Provinces	Provincial Office of Natural Resources and Environment, Provincial Office of Agriculture and Forestry, LWU	-	-	Project implementation mechanism, implementation status, challenges, adaptation to challenges, sustainability of results, monitoring and reporting mechanism (present and future), recommendations, lessons
District officials <u>Under Savannakhet:</u> Champhone District Sonnabouly District Songkhone District <u>Under Champasak:</u> Pathoumphone District	District Office of Natural Resources and Environment, District Office of Agriculture and Forestry, LWU	-	-	Project implementation mechanism, implementation status, challenges, adaptation to challenges, sustainability of results, monitoring and reporting mechanism (present and future), recommendations, lessons
Community Kadan village	Village chief, leader of the community groups of each subject area	Community management committee of each of the activities of the project	Direct observation of fish hatcheries, fish farming, chicken raising, chicken hatching, clearing of weeds, organic vegetable production, fodder cultivation, FCZ, veterinary centre, compost production and water management activities	Information will be acquired on FCZ management, fish farming, native fish hatching, veterinary and livestock support, revolving funds, chicken raising support, organic vegetable production, clearing of weeds in wetlands, water management arrangements in wetlands, fodder production, management of FCZ, etc.; also information on impact, sustainability and challenges will be acquired
Nonglamchonh village (not target village but supported)	Village chief, leaders and members of the	Management committee members	Hotay Pidock Ecotourism site, women's activities (handicrafts)	Will acquire information on contribution made by the project and management arrangement made and sustainability of the results

Stakeholder groups	Key informant interview	Focus groups	Other (specify)	Key areas of enquiry
Kengkokdong village	Village chief, leader and members of the community groups of each subject area	Community management committee of each of the activities of the project	Direct observation of fish hatcheries, fish farming, chicken raising, chicken hatching, wetland demarcation, clearing of weeds, organic vegetable production, fodder cultivation, FCZ, veterinary centre, compost production and water management activities	Information acquired on FCZ management, fish farming, native fish hatching, veterinary and livestock support, revolving funds, chicken raising support, organic vegetable production, clearing of weeds in wetlands, water management arrangements in wetlands, fodder production, management of FCZ, etc.; also information will be acquired on impact, sustainability and challenges
Taleo village	Village chief, leader of the community groups of each subject area	Community management committee of each of the activities of the project	Direct observation of wetland conservation and demarcation, ecotourism in old temple and Turtle Lake, veterinary centre, native chicken raising, fishery, native fish hatchery, water use management areas, fodder cultivation, FCZ and reforestation around lake	Will discuss on ecotourism support and arrangements, veterinary activities and revolving funds, native chicken and fish hatcheries, FCZ activities, water management agreements and issues, demarcation of wetland and reforestation around lake, etc.; also information on impact, sustainability and challenges, recommendations will be discussed
Dondeng village	Village chief, leader of the community groups of each subject area	Community management committee of each of the activities of the project	Direct observation of ecotourism, veterinary centre, native chicken raising, fishery, native fish hatchery, water use management areas, fodder cultivation, FCZ, and Souy Lake	Will discuss on ecotourism support and arrangements, veterinary activities and revolving funds, native chicken and fish hatcheries, FCZ activities, water management agreements and issues, forest management, handicraft promotion, lake management support, etc.; also information on impact, sustainability and challenges, recommendations will be discussed
Telang village	Village chief, leader of Turtle Lake management committee	Turtle Lake management committee members	Observation of Turtle Lake and activities done in this site	Will discuss on contribution of the project and also management arrangement and ongoing situation, sustainability, impact, etc.
Songmeaung village	Village chief, leader of the community groups of each subject area	Community management committee of each of the activities of the project		Information on implementation process of the project activities, management challenges, impact of activities, sustainability, etc. will be acquired
Dongyeng village	Village chief, leader of the community groups of each subject area	Community management committee of each of the activities of the project		Information on implementation process of the project activities, management challenges, impact of activities, sustainability, etc. will be acquired

Stakeholder groups	Key informant interview	Focus groups	Other (specify)	Key areas of enquiry
Dongmeaung village	Members of the villagers committee	Ecotourism management committee, veterinary committee, vegetable groups, reforestation and lake conservation committee	Observed monkey forest ecotourism site, reforestation activities	Information on implementation process of the project activities, management challenges, impact of activities, sustainability, etc. will be acquired
Nonsithan village	Village beneficiary	Chicken raising group member	Observation of chicken raising	Discuss on support received, challenges faced, impact, sustainability, etc.
Phapho village	Village chief, leader of the community groups of each subject area	Community management committee of each of the activities of the project	Observe chicken rearing, fishery activities, water management and veterinary activities	Information on implementation process of the project activities, management challenges, impact of activities, sustainability, etc. will be acquired
Phakkha village	Village chief, leader of the community groups of each subject area	Community management committee of each of the activities of the project	Observe chicken rearing, fodder development and renovation of dyke for water management	Information on implementation process of the project activities, management challenges, impact of activities, sustainability, etc. will be acquired
NongMakek village	Village chief, leader of the community groups of each subject area	Community management committee of each of the activities of the project	Observe fodder promotion, fish hatchery (including frog), FCZ and chicken rearing	Information on implementation process of the project activities, management challenges, impact of activities, sustainability, etc. will be acquired
Phalae village	Village chief, leader of the community	Community management committee of	Observe FCZ, chicken raising, veterinary activities	Information on implementation process of the project activities, management challenges, impact of activities, sustainability, etc. will be acquired

Stakeholder groups	Key informant interview	Focus groups	Other (specify)	Key areas of enquiry
	groups of each subject area	each of the activities of the project		
Phommaleuk village	Village chief, leader of the community groups of each subject area	Community management committee of each of the activities of the project	Will observe chicken rearing, fisheries, FCZ, vegetable farming, fodder grass promotion, veterinary programmes	Information on implementation process of the project activities, management challenges, impact of activities, sustainability, etc. will be acquired
Sonote village	Village chief, leader of the community groups of each subject area	Community management committee of each of the activities of the project	Chicken raising, veterinary activities, fodder development, fishery activities will be observed	Information on implementation process of the project activities, management challenges, impact of activities, sustainability, etc. will be acquired
Topsok village	Village chief, leader of the community groups of each subject area	Community management committee of each of the activities of the project	Observation of fishery activities, water management of the river, fodder development, FCZ, chicken raising activities	Information on implementation process of the project activities, management challenges, impact of activities, sustainability, etc. will be acquired
Kietngong village	Village chief, leader of the community groups of each subject area	Community management committee of each of the activities of the project	Observation of chicken raising, fodder development, veterinary activities, FCZ	Information on implementation process of the project activities, management challenges, impact of activities, sustainability, etc. will be acquired
Tétraktys, French NGO working on restoration and promotion of tourism activities	Coordinator	-	Observation of ecotourism sites that are renovated and ecotourism promoted through this NGO with the financial support of the project	Activities done and management arrangement, income generation arrangement focused on women, sustainability, etc.



Picture 1: Fish hatching pond just completed cement plastering in Xonnobuly District. Need to leave tank filling water for some time before using it. The nursery pond recently dug very muddy water from the rain. Need to work on the pond to maintain clean water before releasing fish.



Picture 2: At one of the sites (near forest) of Pathoumphone District, dam construction work started on the day the terminal Evaluation Team arrived. However, the 2021 PIR stated that this was 70 percent completed (left). Similarly, in the same district (near road), construction for raising the height of the existing dam was not done due to rising rainwater levels. In the 2021 PIR, however, it is 100 percent complete (right).

Annex

Annex 1. Terms of reference

<https://openknowledge.fao.org/handle/20.500.14283/cd0956en>

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