Final Report

Terminal Evaluation "Effective Governance for Small-scale Rural Infrastructure and Disaster Preparedness in a Changing Climate in Lao PDR

GEF Project ID: 4554 / UNDP Project ID: 00084024 / UNDP PIMS ID: 4710

Focal area: climate change, country/region: Laos PDR / Asia Pacific

Project sites: provinces of Sekong and Saravane

Evaluation timeframe:
01/10/2017 – 05/11/2017

Prepared by:

Mr Vincent Lefebvre
Mr Singha Ounniyom

Date: 26/03/2018

Acknowledgments:

The evaluation team wishes to thank the project team for their detailed assessment of the project situation, Mrs. Margaret Jones Williams from UNDP Environmental Unit as well as Mr. Vanxay Boutanavong for facilitating the mission in the provinces. We are also grateful to Mr. Chanhao Xaiyathong and Mr. Sangviane Thidalak, respectively focal points of Sekong and Saravane provinces for accompanying the team and facilitating the on-site contacts with district authorities and communities.

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Executive Summary

Project summary table

Project Title:	Effective Governance for Small-scale Rural Infrastructure and Disaster Preparedness in a Changing Climate			
GEF Project ID:	0004554		*at endorsement (Million US$)*	*at completion (Million US$)*
UNDP Project ID:	0004710 (PIMS)	LDCF (GEF) financing:	4,700,000	4,700,000
Country:	Lao PDR	IA/EA (UNDP) own:		
Region:	Asia Pacific	Government (In kind): Government (parallel):	375,000 4,210,000	375,000 4,210,000
Focal Area:	Climate change	Other: IUCN (parallel): UNDP (parallel): UNDP (in-cash):	 4,150,000 21,856,896 280,000	 4,150,000 21,856,896 280,000
FA Objectives, (OP/SP):	Capacity building to mainstream climate change adaptation policies into development plan.	Total co-financing:	30,872,896	30,872,896
Executing Agency:	UNDP	Total Project Cost:	35,572,896	35,572,896
Other Partners involved:	Department of Disaster Management and Climate Change, Ministry of Natural Resource and Environment	ProDoc Signature (date project began):		May 2013
		(Operational) Closing Date:	Proposed: Dec 2016	Actual: Dec 2017

Project description

The project "Effective Governance for Small-scale Rural Infrastructure and Disaster Preparedness in a Changing Climate" has been implemented from 2013 until December 2017 in Lao DPR's southern provinces of Sekong and Saravane. It follows an assessment about the increasing vulnerability of the provinces to flooding and landslides from excessive rain storms and droughts and dry periods.

These have been amplified in recent years by anthropic actions in the agriculture, mining and hydropower sectors that are affecting negatively infrastructures like rural roads, community water supply and agriculture by altering irrigation potential.

The *project has been addressing these issues* through strengthening climate change analysis and planning at subnational level, making available additional resources to make infrastructures more climate-proof and improving local planning by taking into account simultaneously ecosystem functions and services.

The *objective of the project* is to improve local administrative systems affecting the provision and maintenance of small-scale rural infrastructure through participatory decision making reflecting community needs and natural systems vulnerable to climate risk.

Three outcomes were formulated: 1. enhanced capacities for local administrative institutions to integrate climate risks in participatory planning and financing of small-scale infrastructures, 2. incentives in place for small-scale rural infrastructures to be protected and diversified against climate change induced risks, 3. natural assets are managed to ensure critical ecosystem services in both Sekong and Saravane provinces.

The *project was funded* for 4 years (including a 1 year no-cost extension) with 4.70M$ from GEF, 0.28M$ TRAC funds from UNDP and 0.38M$ in-kind contribution from Government.

The *project stakeholders* were the following: (i) UNDP as the GEF implementing agency, (ii) MoNRE as the project implementing partner (oversight by the DNDMCC) and in charge of components 1 and 3, (iii) MoHA in charge of component 2, (iv) UNCDF for channelling project financial resources for component 2 through MoHA's decentralised DDF mechanism, (v) PONRE and POHA with an oversight role for their respective components and (vi) DONRE and DOHA for direct implementation and requesting investment funds for infrastructures when required.

Terminal evaluation purpose and methodology

The *terminal evaluation's objective* is to review the performance of the project using the 5 DAC evaluation criteria (relevance, efficiency, effectiveness, impact and sustainability) but also its design, implementation process and the overall achievements and specific results in relation to the initial objective.

Two international and national consultants carried out the evaluation. They adopted a *participatory and consultative approach* with all stakeholders and ensured that (i) stakeholders had the opportunity to contribute to the evaluation process, (ii) information was triangulated, (iii) recommendations were based on consensus and agreement by stakeholders and (iv) the evaluation debriefing was made in a transparent manner.

The *data collection tools* were the review of key documents and literature, consultation and interviews of stakeholders and field missions to project site including final beneficiary interviews using gender-based approaches.

Evaluation findings

Design and formulation:

The *project design logic* was address key issues like inadequate centralised interventions implementation, the lack of technical and managerial expertise of local Government and Laos' increased vulnerability to extreme events that affect rural small scale infrastructures. The project focused its efforts on (i) increasing local planning capacities to respond to climate change hazards, (ii) increasing availability of information about climate change issues, (iii) increasing the resilience of rural infrastructures through strengthening infrastructures codes and standards, (iv) divulge information non the linkages between climate change, environmental degradation and the need for ecosystem based adaptation measures and (v) take advantage of an existing decentralised mechanism to allocate infrastructure funds directly at district level - DDF -.

The project combined two implementation approaches: convention top-down project implementation by MoNRE and decentralised implementation by MoHA, which required close collaboration and coordination between the two ministries.

The *log frame analysis* showed most indicators were SMART but somehow lacked information whether/how institutional and final beneficiaries wold take advantage of the project's benefits (ownership and empowerment).

Most *assumptions and risks* were controlled during the intervention but some technical and institutional risks were not identified properly like (i) coordination issues between MoHA and MoNRE that could result in extensive implementation delays with disjoint outcome results, (ii) insufficient Government's capacity to follow-up infrastructures' status on domestic financial resources and (iii) difficulty of final beneficiaries to ensure a regular maintenance programme.

The *project's replication potential* was very high as it was to use the DDF mechanism which is part of Government's strategy for decentralisation, (ii) the project's climate resilience approach can be applied anywhere in the country, (iii) the CR updated guidelines are straightforward and need not local district staff retraining and (iv) the project had wagered on policy influencing to use a similar approach to CR in other interventions.

UNDP's comparative advantage was to (i) be a neutral platform for development and able to build a trustful relationship with Government, (ii) favour a pro-poor approach through multi-sectoral intervention, (iii) multipurpose agency have the capacity to mobilise financial resources and other specialised UN agencies, (iv) favour small-scale infrastructures. It also has extensive experience of GEF grants in Laos and can bring expertise mostly in relation to RBM and M&E.

MoNRE has been the implementing partner. The following *implementation arrangements* were the following: Project Board, National Project Director, Project Manager, National GPAR Secretariat under MoHA and national PSU under MoNRE.

Project implementation:

Adaptive management: the project has been managed under the NIM modality. HR mobilisation was very slow at the start of the project (approximately a 1 year delay) but also inconsistent over the course of the project (numerous resignations) resulting in further implementation delays. The governance structure of the project was the following: annual Project Board meeting to endorse the annual plan and resolve key issues that might impact the project's results, quarterly meeting to get an update on activities' delivery and planning for the next quarter, monthly meetings to discuss technical issues and follow-up implementation. Due to these delays, a 12 months no-cost extension was granted by mid-project but despite this, there was no significant change in objectives, results or activities.

On partnerships, the project worked in close cooperation with the GPAR Secretariat and UNCDF to transfer district infrastructure funds, the Ministry of Agriculture for irrigation related issues and the Ministry of Transport for rad-related infrastructures.

M&E feedback resulted in (i) a substantial reduction of infrastructures' projects (from 48 to 28), (ii) the inclusion of ecosystem considerations into the CRVA process, (iii) changes of ecosystem indicators, (iv) the project's extension as mentioned above.

Project finance confirmed that the operationalisation of the project actually took nearly two years instead of just one, evidencing quite early on the need for a project extension. The100% year after year), resulting from a sound planning capacity and effective financial management system. The resource allocation amongst outcomes 1 and 3 shows significant changes that confirm disjointed implementation between outcomes 2 and 3 (much delayed outcome 3 delivery resulting in lesser than expected spending).

The M&E system comprised: (i) the inception report with annual work plans, (ii) annual progress reports and project implementation reviews, (iii) periodic on-site visits, (iv) external MTR and TE and (v) audits. Sustained staff rotation made it difficult to keep a unified project M&E system. Eventually, two separate monitoring systems were put in place independently by both MoNRE and MoHA. A Learning Knowledge Sharing plan was formulated but not much implemented until after the MTR. An exit strategy was produced with clear

references to the Sam Sang initiative, the need to mainstream updated guidelines into the DDF mechanism but also go further with upgraded building codes to make infrastructures CR-resilient.

The department in charge of disaster management and climate change under MoNRE oversaw the project's *implementation*. One of the main characteristics of the project has been its asymmetrical implementation approach by MoHA (decentralised) and MoNRE (centralised); this hybrid implementation system resulted in significant difficulties to coordinate activities and may have been to a large extent a factor for disjointed implementation between outcomes 2 and 3 (infrastructures and ecosystem-based adaptation measures respectively). UNDP as the implementing agency provided regular administrative/technical support (systematic presence at annual, quarterly and monthly meetings) and contributed to enhancing the communication strategy of the project, most during the second half of the project.

Project results:

Overall results:

- *Outcome 1 - capacities provided for local administrative institutions to integrate climate risks into participatory planning and financing small scale rural infrastructures*: outputs were achieved with district planners acquiring the necessary skills and knowledge to undertake climate change risk assessment; the technical capacity in climate resilient planning was provided to over 250 officials (Government and communities); water harvesting, storage and distribution infrastructures adaptation measures identified and integrated into development plans through CRVAs; detailed project investments finalised and tender documents prepared.
- *Outcome 2 – incentives in place for small-scale rural climate proof infrastructures benefitting over 50,000 people in all 12 districts of Sekong and Saravane provinces*: over 37,000 people were exposed to the project's results through 15 upgraded irrigation schemes, 6 water supply projects, 1 flood gate improvement, 5 community bridges and 2 check-dams.
- *Outcome 3 – natural assets covering at least 60,000ha managed to ensure maintenance of critical ecosystem services*: this outcome was partially achieved; 9 sub-catchment areas were covered by the project through vegetation restoration, soil erosion reduction and land slope stabilisation; the DDF mechanism was upgraded as well to include requirements for a climate resilience grant system.

The *Project relevance* is highly relevant in view of Laos DPR's strategies and policies related to climate change and in particular climate resilience and adaptation (Sam Sang initiative, 5-year National Socio-Economic Development Plan VIII, MoNRE Vison towards 2030, the 2009 NAPA, the national strategy on climate change and the national Governance and Public Administration Reform Programme [NGPAR]).

Project effectiveness:

- *Outcome 1 - capacities provided for local administrative institutions to integrate climate risks into participatory planning and financing of small scale rural water infrastructure provision*: activities under this outcome did contribute to the objective; district staff have now the with basic skills to mainstream climate resilience into planning processes, however, empowerment remains weak.
- *Outcome 2 - incentives in place for small-scale rural infrastructure to be protected and diversified against climate change induced risks benefitting at least 50,000 people in 12 districts of Sekong and Saravane provinces*: the DDF mechanism was a very effective solution to mainstream climate change considerations into rural infrastructures; it was however a relatively slow process with the need for formal approval of CR infrastructure design by MoNRE, evidencing still the difficulty for district staff to implement by themselves the CR guidelines that may be too DDF-specific to be replicated alsewhere.
- *Outcome 3 - natural assets managed to ensure maintenance of critical ecosystem services, especially water provisioning, flood control and protection under increasing climate change induced stresses, in Sekong*

and Saravane provinces: this outcome little contributed to the objective; EbA measures were implemented later after most infrastructures were completed, hence of lesser added value from both district officials and final beneficiaries' view point.

Project efficiency: the project spent nearly 5M$ in 5 years for 28 infrastructures and 9 EbA measures (0,15M$/subproject). While still not on par with international standards, climate proof infrastructures are expected to increase their lifetime by a factor of two or three at best. This may be considered highly efficient but is actually a best case scenario as it is conditioned by an inclusive maintenance and repair policy.

Country ownership: the project is in line with most Government strategic documents. The upgraded CR guidelines were approved and MoHA incorporated the CRVA and performance-based criteria into the DDF mechanism.

Mainstreaming: the project was well aligned with UNDP's country programs, contributing to sustainable natural resources and environmental management and adaptation - CDP Outcome 2 – and UNDAF's outcome 8 on climate change adaptation and mitigation.

Sustainability: *social and cultural risks* are relatively high with weak community ownership, still relying on Government for heavy maintenance and repairs. Interviews showed there is still no significant mind-set change on how to tackle infrastructures sustainability both at district and community levels. The pro-poor approach may be partly to blame with little emphasis on revenue/income generation form upgraded infrastructures. The *technical risks* are considerably lower now with increased lifetime duration of infrastructures; this capacity of communities and district authorities still remains limited to slight damages and design issues and major repairs still seem to be out of reach. The *institutional risks* are very high because there were few activities to mainstream lessons learned at central level for replication and Government empowerment. These risks were lowered as UNPD and the technical team supported the mainstreaming of the CR guidelines into new climate change-related interventions' approach focussing on the infrastructures themselves. *Economic and financial risks* are also high because the pro-poor approach does not favour the inclusion of economic components so as to optimise accrued infrastructures benefits (e.g. income generation). EbA measures and infrastructures were not simultaneously implemented resulting in high *environmental risks* because EbA measures are key to long-term infrastructures. At *socio-political leve*l, interviews showed that autonomous decision taking at district level remains largely limited to utilise the project's benefit into own district routine activities (need for central guidance).

Impact: the project's *social impact* has resulted from a number of activities to raise awareness of beneficiary communities resulting in the re-activation of community groups, better community dialogue and cohesion as the project's intervention required co-decision making for a number of activities (site selection, labour contribution…). Awareness on environmental and infrastructure damage remained weak and disjointed implementation of outcomes 2 and 3 did not help. The *economic impact* has been largely positive for bridges and dams and negative for water supply. While this has impacted to some extent the poverty level of beneficiaries, it did not significantly result in economic development because the project's support did not fully take advantage of the economic potential of rehabilitated infrastructures (particularly in the case of agriculture/dams). The project has been very influential on institutions through capacity building activities with increased understanding on CR, the design of CR projects, related technical specifications and upgraded standards of construction. High staff rotation was somewhat negatively affecting CR mainstreaming into district institutions. The environmental impact has been very limited with disjointed implementation of infrastructures and EbA measures. It was most positive when direct linkages between EbA measures and infrastructures were evidenced.

Evaluation rating table

Evaluation Ratings:			
1. Monitoring and Evaluation	***rating***	**2. IA& EA Execution**	***rating***
M&E design at entry	S	Quality of UNDP Implementation	HS
M&E Plan Implementation	MS	Quality of Execution - Executing Agency	S
Overall quality of M&E	MS	Overall quality of Implementation / Execution	S
3. Assessment of Outcomes	**rating**	**4. Sustainability**	**rating**
Relevance	R	Financial resources:	ML
Effectiveness	MS	Socio-political:	ML
Efficiency	S	Institutional framework and governance:	ML
Overall Project Outcome Rating	S	Environmental:	ML
		Overall likelihood of sustainability:	ML

Ratings for Outcomes, Effectiveness, Efficiency, M&E, I&E Execution	***Sustainability ratings:***	***Relevance ratings***
6: Highly Satisfactory (HS): no shortcomings 5: Satisfactory (S): minor shortcomings 4: Moderately Satisfactory (MS): moderate shortcomings 3. Moderately Unsatisfactory (MU): significant shortcomings 2. Unsatisfactory (U): major problems 1. Highly Unsatisfactory (HU): severe problems	4. Likely (L): negligible risks to sustainability 3. Moderately Likely (ML): moderate risks 2. Moderately Unlikely (MU): significant risks 1. Unlikely (U): severe risks	2. Relevant (R) 1. Not relevant (NR) ***Impact Ratings:*** 3. Significant (S) 2. Minimal (M) 1. Negligible (N)
Additional ratings where relevant: Not Applicable (N/A) Unable to Assess (U/A		

Summary of conclusions, recommendations and lessons learned

Conclusions:

The project has been innovative for mainstreaming climate resilience in terms of design (combination of small-scale infrastructures and EbA measures), responsiveness (participation by all direct stakeholders and ownership) and implementation approach (using a well-proven decentralised implementation mechanism – DDF -). The project however failed to generate enough interest at central level to influence policy making on CR and related construction codes or improve the sustainability model based on community maintenance and repairs by Government. In that context, the development opportunities that the project has shown have not been fully explored by Government. The project has been both successful in responding to pressing needs by the communities to rehabilitate rural infrastructures but also increase substantially their lifetime.

The hybrid execution mechanism (decentralised outcome 2 by MoHA and centralised approach for outcome 3 under MoNRE) has proved to be a complex construction and alternatives should be considered in the future.

In operational terms, the project has raised the local capacity of district technical staff on climate resilience approach to infrastructures enhancement.

The major *achievements and strengths* of the project are the following: (i) the CRVA approach is an effective tool for communities' participation and providing an overall view of local issues relates to climate change risks to infrastructures, (ii) higher construction standards were used resulting in longer lifetime of infrastructures, (iii) Government endorsed updated guidelines taking in to account CR have been produced for integration into the DDF mechanism, (iv) the project was successful in developing inter-sectoral collaboration at district level, (v) the participatory approach ensured a high degree of ownership (but still little empowerment), (vi) an appropriate exit strategy was developed by the end of the project meaning that most project results would be mainstreamed into new donor funded interventions.

The main *shortcomings and weaknesses* include: (i) the lack of game-changing sustainability model still based on a pro-poor approach with little attention to economic development (ii) despite good ownership of infrastructures by the communities, their actual engagement remains weak with a still widely recognised role of Government to ensure infrastructures sustainability, (iii) the lack of project communication strategy did not help stakeholders to get a good understanding of CR issues at stake and their negative impact on infrastructures, (iv) project's staff retention has been very low and this affected negatively the delivery of activities, (v) while taking advantage of all project resources, interviews showed that there is little if any appropriation at central level of the project's benefits (CR guidelines, changes in construction code, new policy on EbA).

Recommendations and lessons learned:

The *lessons learned* include:

- *for the design* of the project: the need for (i) a similar implementation mechanism amongst all stakeholders involved, (ii) a simpler delivery mechanism avoiding two-pronged implementation, (iii) a formal communication strategy, (iv) an institutional project component making sure that resources are devoted to ensuring benefit's appropriation at central level, (v) a comprehensive exit strategy (sustainability ensured through quality criteria, community ownership and income generation, and central Government empowerment, (vi) exploring complementarities between donors to involve different sectors to ensure high impact to communities, (vii) Governmental contribution for critical infrastructures and (viii) mainstreaming CRVAs in Government's activities and ensuring that resulting LUP are actually financed and implemented.
- *for the implementation and M&E* of the project: the need for (i) community engagement to be initiated right at the start of the project before infrastructure and EbA selection to ensure fuller commitment, (ii) an optimised implementation approach through a single infrastructure and EbA package, (iii) indicators that measure quality (not only quantity) of infrastructures and EbA measures, community and Government empowerment, (iv) enhanced M&E moving from activity to RBM monitoring, (v) an enhanced project information system within the State apparatus to ensure quality information sharing.

Several *actions are needed to follow-up and reinforce* project results including: action #1: the integration of CR guidelines into new generations of development projects, action #2: the integration of DDF CR guidelines into Government's routine plans and actions, action #3: sharing the benefits/added value of CRVA with relevant stakeholders, action #4: empowering beneficiary communities to ensure follow-up of EbA measures and maintenance of infrastructures, action #5: develop a district follow-up programme of infrastructures and

EbA measures as part as routine activities carried out by (provincial) district DONRE, action #6: formalisation of infrastructures rules and regulations into official by-laws.

Proposals for future directions underlying main objectives include the need for (i) integrating EbA measures into Government governance systems as these are still viewed as extra activities peripheral to infrastructures, (ii) Government co-financing of critical infrastructures (10-15%), (iii) mainstreaming economic aspects into project design in addition to climate proofing so as to take fuller advantage of infrastructures economic potential, (iv) financial provision to review the construction standards to make infrastructures climate proof, (v) considering new similar interventions' decentralisation to the provincial level, (vi) wider advocacy of CR at the highest level (ministries) to ensure construction standards changes and (vii) considering small scale infrastructures climate proofing from other sectors (ministries).

List of Abbreviations

ADB	Asian Development Bank
AMAT	Adaptation and Monitoring Tool
APR	Annual Progress Report
AWP	Annual Work Plan
CC	Climate Change
CCA	Climate Change Adaptation
CDR	Combined Delivery Report
CR	Climate Resilience
CRVA	Climate Resilience and Vulnerability Assessment
DAC	Development Assistance Committee
DDF	District Development Fund
DDF-BBG	District Development Fund Basic Block Grant
DDSC	District Development Support Committee
DLPD	Department of Land Planning and Development
DNDMCC	Department of National Disaster Management and Climate Change
DOHA	District Office of Home Affairs
DONRE	District Office of Natural Resources and Environment
DWR	Department of Water Resources
EbA	Ecosystem-based Adaptation
EU	European Union
GEF	Global Environment Fund
GIDP	Governance for Inclusive Development Programme
GPAR	Governance and Public Administration Reform
HR	Human Resources
ICEM	International Centre for Environmental Management
IFAD	International fund for Agricultural Development
IP	Implementing Partner
IRAS	Improving the Resilience of the Agriculture Sector in Lao PDR to Climate Change Impacts

IUCN	International Union for Conservation of Nature and Natural Resources
IWMR	Integrated Water Resources Management
LDCF	Least Developed Countries Fund
LDCF2	Effective Governance for Small-Scale Rural Infrastructure and Disaster Preparedness in a Changing Climate
MAF	Ministry of Agriculture and Forestry
M&E	Monitoring and Evaluation
MDG	Millennium Development Goal
MoHA	Ministry of Home Affairs
MoNRE	Ministry of Natural Resources and Environment
MPI	Ministry of Planning and Investment
MRC	Mekong River Commission
M&R	Maintenance and Repair(s)
MTR	Mid-Term Review
NA	National Assembly
NAFRI	National Agriculture and Forestry Research Institute
NGPES	National Growth and Poverty Eradication Strategy
NIM	National Implementation Modality
NPD	National Project Director
NSEDP	National Socio-Economic Development Plan
PIR	Project Implementation Review
POHA	Provincial Office for Home Affairs
PPSU	Provincial Project Support Unit
PDR	People's Democratic Republic
PPG	Project Preparation Grant
PONRE	Provincial Office of Natural Resources and Environment
PRODOC	Project Document
PSU	Project Support Unit
RBM	Results Based Management
SDC	Swiss Development Co-operation
SCSD	Strengthening Capacity and Service Delivery of Local Administrations
SGP	Small Grant Programme
SIDA	Swedish International Development Agency

SMART	Specific Measurable Accessible Relevant Time-bound
TE	Terminal Evaluation
ToR	Terms of Reference
TT	Tracking Tool
TRAC	Target for Resource Assignment from the Core
UNCDF	United Nations Capital Development Fund
UNDAF	United Nations Development Assistance Framework
UNEP	United Nations Environment Program
UNDP	United Nations Development Program
UNEP	United Nations Environment Program
UNICEF	United Nations Children's Fund
UNHABITAT	United Nations Human Settlements Programme
US$	United States Dollar
V&A	Vulnerability and Assessment
WB	World Bank
WUA	Water User Association
WUC	Water User Committee
WWF	World Wide Fund for Nature

1. Introduction

This report presents the findings of the Mid-Term Review (MTR) of the UNDP-supported-GEF-LDCF-Financed-Government of Lao PDR Project "*Effective Governance for Small-scale Rural Infrastructure and Disaster Preparedness in a Changing Climate*". This mid-term review was performed by an Independent Evaluation Team composed of Mr. Vincent Lefebvre and Mr. Singha Ounniyom on behalf of the UNDP.

The provinces of Sekong and Saravane in the South of Lao PDR are heavily affected by climate-related events. During recent years, changing rainfall and temperature patterns have caused regular storms leading to flash flooding and landslides, as well as more frequent and persistent dry periods and droughts. These climate threats have differing impacts on physical infrastructure and ecosystems, depending on location and topography. Amongst the most severe are the regular destruction of rural roads and small-scale irrigation schemes, as well as water scarcity for household and agricultural consumption. These climate-induced threats are further affected by the progressive disappearance of the protective and water storage functions of ecosystems, caused by drivers such as slash and burn agriculture, monoculture, mining and hydropower investments. The combination of climate change related pressures and these other drivers mean that village water supply systems dry out more often, and that baseline physical infrastructure, which is not protected from irregular and intense water flows, is degrading ever more rapidly.

The underlying causes contributing to this situation include basic geographical factors, poor application of infrastructure construction standards and maintenance practices, and a social and ethnic context that increases the vulnerability of certain groups to climate risks. In order to address these issues, there are critical barriers to remove. They include (i) weaknesses in climate change analysis and planning at sub-national level; (ii) financial constraints in resourcing the additional costs of building greater redundancy into rural infrastructure; (iii) a silo approach to local planning whereby ecosystem functions and services are not taken into account, and (iv) the limited incentives that exist to encourage local officials and decision makers to address climate related risks.

In order to remove these barriers, the government of Lao PDR through MoNRE with the support of UNDP and financial resources from the GEF-LDCF formulated this project to "*improve local administrative systems affecting the provision and maintenance of small scale rural infrastructure through participatory decision making that reflects the genuine needs of communities and natural systems vulnerable to climate risk"*. It sought to reflect the needs of communities vulnerable to climate variability in local planning and budget processes at district level, so that the development prospects of these communities are secured in face of increasing climate risks.

The objective of the project is to *"Improve local administrative systems affecting the provision and maintenance of small scale rural infrastructure through participatory decision making that reflects the genuine needs of communities and natural systems vulnerable to climate risk*". This objective will be achieved through three outcomes (and 9 outputs):

- Capacities provided for local administrative institutions to integrate climate risks into participatory planning and financing of small scale rural water infrastructure provision;
- Incentives in place for small-scale rural infrastructure to be protected and diversified against climate change induced risks (droughts, floods, erosion and landslides) benefitting at least 50,000 people in 12 districts of Sekong and Saravane provinces;

- Natural assets (such as wetlands, forests and other ecosystems in sub-catchments) are managed to ensure maintenance of critical ecosystem services, especially water provisioning, flood control and protection under increasing climate change induced stresses, in Sekong and Saravane provinces.

The project is implemented in Sekong and Saravane provinces in southern Lao PDR; including all 12 districts in these 2 provinces. It is a project supported by UNDP, the GEF-LDCF, and the Government of Lao PDR. It is funded by a grant from the GEF-LDCF of USD 4,700,000, a cash contribution from UNDP-TRAC of USD 280,000 and an in-kind contribution of USD 375,000 from the Government of Lao PDR. It started in May 2013 and will end at the end of December 2017 (5 years), including an already approved one-year extension. The Ministry of Natural Resources and Environment (MoNRE) is the Implementing Partner and has overall responsibility for the management of the project. A national Project Support Unit was set-up at MoNRE housing a staff of 10. A Project Board oversees the implementation of the project.

1.1 Purpose of the evaluation

As mentioned above, the project ''Effective Governance for Small-Scale Rural Infrastructure and Disaster Preparedness in a Changing Climate'', has started since May 2013. The Ministry of Natural Resources and Environment (MoNRE) in partnership with the Ministry of Home Affairs (MoHA) were the implementing agencies and the Global Environment Fund (GEF) as the main donor.

Pursuing the UNDP and GEF monitoring and evaluation (M&E) policies and procedures, all full and medium-sized UNDP supported and GEF-financed projects are required to undergo a terminal evaluation upon completion of implementation. Towards this end, UNDP has commissioned the terminal evaluation by contracting independent evaluators (international and national) and carried out in accordance with the UNDP-GEF Monitoring and Evaluation Policy and facilitated by the UNDP Country Office in Lao PDR.

The purpose of the terminal evaluation was to carry out a systematic and comprehensive evaluation of the performance of the project using the five DAC criteria assessing its design, processes of implementation, and achievements relative to project objectives. It was aimed to obtain and provide timely, precise and reliable information on how well the project was designed, implemented, progress towards project objectives, how well resources area used cost-effectively, project impacts, and potential ownership for future sustainability. This information is needed by key stakeholders; Government – MoNRE and provincial PONRE, MoHA, MPI, etc. as well as Development and Donors – UNDP, GEF, UN HABITAT, UNCDF, IFAD, etc. for decision- making and planning similar projects in the future.

The objectives of the terminal evaluation are to assess the achievement of project results and to draw lessons that can both improve the sustainability of benefits from this project and aid in the overall enhancement of UNDP programming. The specific objectives of the terminal evaluation are:

- To assess the design, implementation and monitoring and evaluation processes;
- To assess project achievements towards project goals, objectives and outcomes planned;
- Determine whether resources (finance, human and material) were used economically and wisely;
- Assess potential impact of EbA measures and climate proof infrastructures communities and environment (technical, economical, financial, and social and environmental);

- Assess management and potentials for program ownership, sustainability and any basis to make decision on future program design;
- Provide specific and practical recommendations and document lessons that can be utilized for improving sustainability future projects to be designed.

1.2 Scope and methodology

1.2.1 Scope

Regarding the scope, the evaluation focused primarily on assessing the performance of the project in light of the accomplished outcomes, objectives and effects using the evaluation criteria of relevance, effectiveness, efficiency, sustainability, and impact, as defined and explained in the UNDP Guidance for Conducting Terminal Evaluations of UNDP-supported and GEF-financed Projects.

Relevance assesses how the project relates to the development priorities at the local, regional and national levels for climate change and coherent with main objectives of GEF focal areas. It also assesses whether the project addressed the needs of targeted beneficiaries at local, regional and national level.

Effectiveness measures the extent to which the project achieved the expected outcomes and objectives. It assesses whether the project under evaluation has been effective in achieving expected outcomes and objectives; how risks and risk mitigation were being managed, and what lessons can be drawn for other similar projects in the future.

Efficiency is the measure of how economically resources (funds, expertise, time, etc.) are converted to results. It also examines how efficient were partnership arrangements (/linkages between institutions/ organizations) for the project.

Impact examines the positive and negative, primary and secondary long-term effects produced by the development intervention, directly or indirectly, intended or unintended. It examines whether the project achieved the intended changes or improvements (technical, economic, social, cultural, political, and ecological). In GEF terms, impacts/results include direct project outputs, short to medium-term outcomes, and longer-term impact including global environmental benefits, replication effects and other local effects.

Sustainability is the ability of the project interventions to continue delivering benefits for an extended period of time after completion; it examines project's sustainability in terms of finance, institutional, social and environment.

Employing the above explained evaluation criteria, the terminal evaluation covered all activities supported by UNDP/GEF and, where appropriate, activities supported by the host institution, MoNRE and MoHA as well as activities that other collaborating partners supported as part of the co-finance to the project. In terms of timing, the evaluation covered all interventions of the project from its inception, October 2013 to the planned closing date, December 2017. The evaluation has been conducted in a way it provides evidence-based information that is credible, reliable and useful.

1.2.2 Methodology

The terminal evaluators adopted a participatory and consultative approach ensuring close engagement

with government counterparts, UNDP Country Office, project team, and key stakeholders based at national and provincial levels.

Several basic principles used to carry out the evaluation include:

- **Effective participation** of all stakeholders (government, agencies, donors, final beneficiaries)
- **Crosschecking** of gathered information
- Emphasis on **consensus and agreement** on the recommendations by the stakeholders.
- **Transparency** of debriefing

Overall, the evaluation tools employed during the evaluation were the following: review of key documents and literature, consultation and interview of stakeholders, and field missions to project sites. In this context, the data collection tools used included semi-structured questionnaires for key informants (checklists) and interview guides for focus group discussions by beneficiaries. The tools were developed by the evaluators focusing on evaluation criteria and major outcomes planned and agreed upon with UNDP before application. The interview guides and semi-structured questionnaires are presented in Annex 3.

The adopted methodology is detailed in Annex 2.

1.2.3 Limitations

The limitation of this evaluation was the relatively short time given to conduct the field trip to project sites that are far apart. Given the very limited field trip duration at project sites, the evaluators were able to setup focal groups and interview of key informants in persons during the mission undertaken in Vientiane Capital and provinces of Sekong and Saravane from 23-31 October 2017 and through teleconference for few of them in early November 2017 in order to capture stakeholders' viewpoints.

1.3 Structure of the evaluation report

The present terminal evaluation report is presented in five sections. It initially presents an *executive summary* of the terminal evaluation, giving a brief background of the project and its design, a summary of its findings related to the activities, management, and important aspects such as partnership and sustainability, conclusions and recommendations for future action and programming.

It is followed by an *introduction*, which describes the context and background of the evaluation and gives a brief description of the purpose, scope and focus of the evaluation, and methodology used, and the structure of the report. The next section presents information on the project, including project description, development context, and strategy.

The *findings* section is dedicated to the results achieved towards the outcomes of the project, which is the core of the report, presented under three subheadings related to program design, implementation, and the evaluation criteria. The final section considers the *conclusions* of the evaluation and *recommendations* for future action.

2. Project description and development context

2.1 Project start and duration

The concept note on the project entitled ''Effective Governance for Small-Scale Rural Infrastructure and Disaster Preparedness in a Changing Climate'' was initially prepared by UNDP as GEF Agency in partnership with Government of Lao PDR and submitted to GEF in June 2011. A fully sized project document was submitted by UNDP to GEF in June 2012. The consolidated project document was re-submitted in September 2012 and endorsed by Global Environmental Facility (GEF) in January 2013.

The endorsed project document indicates that implementation starts as of December 2012. However, project reports indicate that project implementation in actual started in June 2013 and will end at the end of December 2017 (five years) following a decision to extend the project (no additional cost) by one year (from December 2016 to December 2017). An inception workshop was conducted over 2 days on November 22-23, 2013: one day with the project team focusing on increasing the understanding of the project team on: (1) project rationale, (2) objective & project results, (3) outcomes & targets, (4) overview, (5) project progress update, (6) annual work plan for 2013, and (7) UNDP Monitoring and Evaluation requirements. The second day was with stakeholders. It was attended by over 80 key relevant stakeholders from the MoNRE, MAF, MPI, MRC, NAFRI, MoHA, GPAR, UNCDF, MoHA, UNDP CO, UNDP Regional, WWF, EU, NA, IRAS, representatives from the 12 target districts of Saravane (8) and Sekong (4) provinces. The focus of this second day was on: the *Project Results Framework*, the overview of the GEF-LDCF Project implementation and tracking requirements, the LDCF Finance delivery mechanism for strengthening institutional capacities and local adaptation and a general discussion on the project, areas for coordination and other important issues concluded this second day of the inception workshop.

2.2 Problems that the project sought to address

Lao people are particularly vulnerable to the effects of climate change because more than 70% of livelihoods are associated with natural resources and the vast majority of Lao people are still poor. Several vulnerability and adaptation analyses indicate that in Lao PDR, there has been an increase in the number of climate hazard related events over the past 20 years as opposed to the preceding 30 years.

Changing rainfall and temperature patterns have caused regular storms leading to flash flooding and landslides, as well more frequent and persistent dry periods and droughts. These climate threats have differing impacts on physical infrastructure and ecosystems, depending on location and topography. Amongst the most severe is the regular destruction of rural roads and small-scale irrigation schemes, as well as water scarcity for household and agricultural consumption.

During the planning of LDCF2 project, Sekong and Saravane provinces have been selected as target project area because these provinces have been heavily affected by climate change. This area has the highest poverty rates in Lao PDR, thus communities in these provinces are especially vulnerable to floods and drought, as well as extreme climate events such as storms and flash floods. Important rural infrastructures such as irrigation channels, rainwater storage systems, check dams, roads, bridges and water supply are regularly damaged in storm events. The rationale of the project is to address weaknesses in climate change analysis and planning, financial constraints for climate proof rural infrastructures,

integrating ecosystem based adaptation measures and incentivize local officials and decision makers to address climate related risk, seeking to reflect the needs of communities vulnerable to climate variability in local planning and budget processes, so as to improve the development prospects of communities facing increasing climate risks. It will be done through a 'three-pronged' approach: (i) strengthening the national, provincial and district capacities for planning for rural infrastructure that incorporates climate considerations; (ii) direct financing for infrastructure projects to vulnerable districts through the existing District Development Fund (DDF) mechanism; and (iii) implementing ecosystem-based adaptation measures that provide additional climate resilience at the watershed level of project infrastructure intervention.

2.3 Immediate and development objectives of the project

The LDCF2 project was designed to increase climate resilience of rural small-scale infrastructure, and communities using them, through participatory planning processes that ensure full consideration of the genuine needs of communities vulnerable to climate variability and change.

The overall Project Objective is to "improve local administrative systems affecting the provision and maintenance of small scale rural infrastructure through participatory decision making that reflects the genuine needs of communities and natural systems vulnerable to climate risk".

The objective of the project will be achieved through three expected outcomes (*see also Annex 1*):

- ***Outcome 1:*** Capacities provided for local administrative institutions to integrate climate risks into participatory planning and financing of small scale rural water infrastructure provision;
- ***Outcome 2:*** Incentives in place for small-scale rural infrastructure to be protected and diversified against climate change induced risks (droughts, floods, erosion and landslides) benefitting at least 50,000 people in 12 districts of Sekong and Saravane provinces;
- ***Outcome 3:*** Natural assets (such as wetlands, forests and other ecosystems in sub-catchments) are managed to ensure maintenance of critical ecosystem services, especially water provisioning, flood control and protection under increasing climate change induced stresses, in Sekong and Saravane provinces

2.4 Baseline indicators established

During the PPG phase of a thorough baseline assessment of climate vulnerability and adaptation options within the two target Provinces (see Annex 8 of the project document). The approach taken for this baseline was based on a methodology developed by the International Centre for Environmental Management, which assessed geographical scope, baseline conditions, vulnerability, and proposed response measures in an eleven-step process.

Based on Project Document and quarterly/annual progress reports, a set of indicators presented in the *Project Results Framework* was reviewed during this review. It includes 10 indicators – each one with a baseline and a target by the end of the project - to monitor the performance of the project at the objective and outcome levels. As documented in the project document, these indicators rely largely on UNDP's "*Monitoring and Evaluation Framework for Climate Change Adaptation*", and are aligned also with the LDCF Adaptation and Monitoring Tool (AMAT). This set of 10 key indicators and their respective

targets did not change during the inception phase. However, some modifications have been made on targets to be achieved by the end of the project in order to reflect the actual capacity to deliver of the project implementing agencies. For example, target of 48 small-scale infrastructure projects (Output 2.2) was revised in December 2015 and reduced to 28 projects.

2.5 Main stakeholders

According to the project implementation arrangement, the main stakeholders of the project were: UNDP, UNCDF, MoNRE, MoHA, MAF, MPI, PONRE, DONRE, POHA, DOHA, PST, DDSC, etc.

UNDP as the GEF implementing agency is responsible for the provision of resources as well as technical expertise to the project, drawing on its knowledge networks and pool of experts, and through external sourcing. It also supports project assurance, ensuring that the project is implemented in accordance with the rules and procedures for managing UNDP projects. The Ministry of Natural Resources and Environment (MoNRE), previously the Water Resources and Environment Administration (WREA), has acted as Implementing Partner (IP) with overall responsibility for the project and reporting to UNDP Lao PDR according to standard NIM procedures. MoNRE has assigned the "Department of National Disaster Management and Climate Change (DNDMCC)" to undertake day-to day implementation activities including responsibility for the implementation of all project components, in partnership with the Ministry of Home Affairs (Component 2).

The DNDMCC established a National Project Support Unit with a full time Assistant Project Manager and other core project staff, located in Vientiane. The National PSU liaised with the existing GPAR-SCSD Secretariat, located in MoHA, which will support the implementation of Component 2.

On the instruction of the IP (MoNRE), UNDP channelled LDCF resources in two ways. For Components 1, 3 and for the project management component, resources were channelled directly to MoNRE in line with standard UNDP budget implementation procedures. For Component 2, they were channelled through UNCDF at the request of the IP.

At Provincial level the National PSU and the GPAR Secretariat worked through the Provincial Support Teams chaired by the Provincial Cabinet Chief. The Heads of the Provincial Office of Home Affairs (POHA) and the Provincial Office of Natural Resources and Environment (PONRE) were the Vice-Chairs of the Provincial Support Teams, acting as focal points for their respective components. MoNRE also established Provincial Project Support Units (PPSUs) within the PONREs of Sekong and Saravane to support the administration and delivery of the project.

At the District level, the project worked through the "District Development Support Team" (DDST) which is headed by DPI and members from all district line offices. It plays an important technical role in terms of planning, budgeting, procuring, reporting and others. In addition, a District Development Support Committee, Chaired by the District Vice-Governor and previously established by MoHA brought together all key agencies to facilitate local planning, budgeting and budget execution. It played a central role in this process, identifying community needs and integrating their findings in annual and five year action plans, as further described below. As with the Provincial level, the District offices of Home Affairs (DOHA) and Natural Resources and Environment (DONRE) acted as project focal points at this level.

The project was expected to achieve three outcomes:

Outcome 1: Capacities provided for local administrative institutions to integrate climate risks into participatory planning and financing of small scale rural water infrastructure provision. By the end of the project, the project planned to achieve: 50% of sub-national officials and 10% of national officials that are able to analyse climate risks for their districts on a macro level (V&A analysis) and are able to identify specific vulnerabilities and adaptation options at village level (CRVA); all 12 target districts are applying a climate resilient planning mechanism including project identification, site assessment, approval, execution and M&E; and, all annual district investment plans include evidence of incremental CCA costings for water sector projects by year 4 and at least 4 provide this evidence by Year .

Outcome 2: Incentives in place for small scale rural infrastructure to be protected and diversified against climate change induced risks (droughts, floods, erosion and landslides) benefitting at least 50,000 people in 12 districts of Sekong and Saravane. The project intends to provide by the end of the project, all target districts at least 2 projects per year in village level climate resilient water harvesting, storage and distribution systems, which informed by CRVA; at least 50,000 people across 12 districts are benefitting from climate change resilient small-scale irrigation infrastructure, which has been informed by CRVA; and, at least 25% in additional CCA funds (annual average) expended over and above baseline; District Development Funding in at least 12 districts, based on a system that rewards districts that perform well against predetermined criteria.

Outcome 3: Natural assets (such as wetlands, forests and other ecosystems in sub-catchments) over at least 60,000 ha are managed to ensure maintenance of critical ecosystem services, especially water provisioning, flood control and protection under increasing climate change induced stresses, in Sekong and Saravane provinces. The project was planned to have at least 6 management and action plans covering over 48 climate resilience small-scale infrastructure investments under implementation across both Sekong and Saravane provinces and over 250 national, provincial and district planners have received knowledge and learning approaches and materials produced by the project on ecosystem based management linkages to infrastructure provision.

3. Findings

3.1 Project design / Formulation

The project design is addressing climate change issues from different angles: (i) suboptimal centralised interventions' implementation, (ii) lack of technical and managerial expertise of local Government staff to effectively deliver results, (iii) Laos' increased vulnerability in times of greater whether patterns' variability due to climate change in an ever more anthropic-induced degraded environment.

With a greater vulnerability to climate change in the South of the country, the project has focussed its efforts on adaptation and mitigation through removing several barriers[1]: (i) increasing local planning capacities to better respond to higher climate change risks, (ii) increase availability of information about climate change issues and its consequences, so that the information can be directly interpreted and solutions applied at local level, (iii) increase the resilience of interventions - rural water infrastructures - through strengthening the infrastructures codes and standards, (iv) divulge information on the linkages between climate change, environmental degradation and extreme climatic/weather events and apply ecosystem-based adaptation measures, (v) increase efficiency and effectiveness of the intervention through taking advantage of an existing decentralised mechanism to allocate funds directly at district level (DDF).

One of the main characteristics of this project has been the combination of 2 different approaches to activities implementation by the 2 main participating ministries: conventional top-down project implementation by MoNRE and decentralised implementation by MoHA, following a previously similar program on local planning (National GPAR programme). This will however entail substantial coordination problems (see assumptions and risks) that will inevitably slow down implementation (see efficiency and effectiveness).

3.1.1 Analysis of logical framework / Results Framework

While the initial project rationale stated that the project would address the NAPA priorities, the review of the logical framework shows that the design was targeting local administrations' capacities (knowledge on CC, planning, implementing, M&E) with a focus on small-scale rural water infrastructures and final beneficiaries with upgraded /reconstruction of small-scale water infrastructures

With three outcomes implemented by different stakeholders, the project design sets out clear responsibilities: outcomes 1 and 3 implemented by MoNRE and outcome 2 implemented by MoHA. Still, the project's logic calls for integrated implementation with a decentralised outcome 2 linked to outcome 3 on EbA measures, hence requiring close collaboration between institutions.

In that respect, the project formulation seems to have adopted a simple design: 2 executing institutions (MoNRE, MoHA), 3 outcomes (capacity building, infrastructures and EbA measures) and the development of climate-resilient infrastructures by using a fast-track implementation mechanism (DDF fund) already in place.

[1] Source : PRODOC pg25

The analysis of the log frame and its set of indicators shows that most if not all of these are SMART with some reservations under outcome 1 and 3 on the Measurement criteria (sMart) for acquired knowledge from capacity building activities which might have been assessed in another way (e.g. by additionality of similar activities externally funded).

If the project can adequately assess its results, there is little if any information whether the targeted (final and institutional) beneficiaries will take advantage of the project's benefits after closure either at local level (e.g. through integration of new knowledge into routine Government activities) or by a multiplication effect (copy-paste effect to other provinces) through similar donor-funded or own Government resources schemes.

The lack of a component supporting institutional ownership and Government empowerment was a risk implying that the project would only benefit its targeted population while Government would not take use the project's benefits for the design and implementation of its domestic policies and strategies at national level.

Indeed, interviews showed that the project was seen primarily as a provincial infrastructure intervention without much activity to ensure that institutional beneficiaries would take advantage of its benefit from it by project's closure.

The design lacked somehow ambition on how to empower central government with the future lessons learned from the project (e.g. institutionalisation of new construction codes, adoption of decentralised approach for small scale infrastructures, climate-proofing to other sectors, combination of EbA and infrastructures as a national policy…).

An additional project component with financial resources to support government into integrating lessons learned within relevant ministries through an updated national policy framework for climate proofing (improved legal frameworks, policies and strategies…) would have been welcome.

A detailed analysis is under Table 1.

Description	Description of Indicator	Target Level at end of project	Specific	Measurable	Achievable	Relevant	Time-bound
Objective: Local administrative systems affecting the provision and maintenance of small scale rural infrastructures improved through participatory decision making that reflects community needs and natural systems vulnerable to climate change	% change in number of districts development plans including climate change adaptation actions in targeted provinces	50% of district development plans in project area including over 5 specific CCA actions by project's end	Y	Y	Y	Y	Y
	% change in the level of active local community participation in climate risk related planning in target provinces and districts	60% of District Development Support Committees record specific climate related concerns emerging from community level annual planning consultations	Y	Y	Y	Y	Y
Outcome 1: Capacities provided for local administrative institutions to integrate climate risks into participatory planning and financing of small scale rural water infrastructures provision	% change in the ability of local and some officials to apply methodologies to analyse climate risks and identify CC vulnerabilities in 12 districts	50% of sub-national officials and 10% of national officials able to analyse climate risks in their districts on a macro-level (V&A analysis) and able to identify specific vulnerabilities and adaptation options at village level (CRVA)	Y	N	Y	Y	Y
	Procedures in place to integrate CC resilient advice and investment for small scale rural water infrastructures into district planning	All 12 districts applying a climate resilient planning mechanism including project identification, site assessment, approval, execution and M&E	Y	Y	Y	Y	Y
	Number of district development plans available, reflecting costs for adaptation in the water sector	Annual district investment plans include evidence of incremental CCA costings for water sector projects by year 4	Y	Y	Y	Y	Y
Outcome 2: incentives in place for small scale infrastructure to be protected and diversified against climate change induced risks benefitting at least 50.000 people in 12 districts of Sekong and Saravane provinces	Number of district routinely investing in climate resilient measures to improve village level water harvesting, storage and distribution systems	By the end of project, all target districts are investing at least 2 projects per year in village level climate resilient water harvesting, storage and distribution systems, which are informed by CRVA	Y	Y	Y	Y	Y
	Number of people benefitting from investments in small-scale irrigation systems to increase their resilience against climate change risks	At last 50.000 people across 12 districts benefitting from climate change resilient small-scale infrastructure which has been informed by CRVA	Y	Y	Y	Y	Y
	District-level fiscal and administrative incentives introduced, incorporating climate resilient measures for small-scale rural infrastructure	At least 25% in additional CCA funds expended over and above baseline Districts Development Funding in at least 12 districts, based on a system that rewards district that perform well against predetermined criteria	Y	Y	Y	Y	Y
Outcome 3: natural assets - over at least 60.000ha - managed to ensure maintenance of critical ecosystem services, especially water provisioning, flood control and protection under increasing climate change induced stresses in Sekong and Saravane provinces	Number of management/action plans developed and under implementation, which protect natural assets through local scale ecosystems based adaptation measures to improve the resilience of small-scale rural infrastructure against floods and drought	At least 6 management and action plans covering at least 48 climate resilience small-scale infrastructure investments under implementation across both Sekong and Saravane provinces	Y	Y	Y	Y	Y
	Number of key project stakeholders aware of links between improved ecosystem management and sustainability of investments in small-scale rural water infrastructure	At least 250 nationals, provincial and district planners have received knowledge and learning approaches and materials produced by the project on ecosystem based management linkages to infrastructure provision	Y	N	Y	Y	Y

Table 1: SMART analysis of the logical framework

3.1.2 Assumptions and risks

The log frame contains several assumptions and risks: 1. Other risks more pressing than climate change are emerging, 2. Insufficient understand of climate change risks among stakeholders, 3. Districts replicate the conventional non-climate resilient planning procedures, 4. Decentralisation policies and approaches delayed during implementation, 5. Infrastructures design not based on sufficient consultations and not

valued by beneficiaries, 6. Local resistance occurs to the introduction of new water management techniques on sociocultural, 7. Land ownership issues in the vicinity of built infrastructure restrict possibilities in introducing new ecosystem based land management approaches grounds.

All those risks may have been well managed by the project if they did occur as they did not significantly alter the project implementation.

The project formulation process, however, failed to identify some critical technical and institutional risks.

These would include:

(i) Coordination issues during implementation between MoHA and MoNRE resulting in delays: because of different implementation approaches by the two ministries and the need to implement concomitantly as outcomes 2 and 3 were closely intertwined, a significant risk to implementation would have been the disjunction of activities from outcomes 2 and 3 resulting in no longer linking infrastructures protection with EbA approaches to ensure sustainability but also no longer evidencing locally – with the final beneficiaries – the need to link environmental protection at watershed level with water-related infrastructures

(ii) Inability of local government to follow-up infrastructures' status resulting in unchecked degradation because of lack budget for transport or lack of human resources: if institutional ownership can be ensured through the decentralised approach – in terms of implementation - the local Government institutions remain financially dependent of central level for regular/routine district budgets; district authorities can ensure regular monitoring and follow-up of new/upgraded infrastructures only if additional financial means are being made available supposedly from central level. Else, this is a business as usual scenario with little or no additional means to ensure follow-up and ultimately infrastructures' sustainability

(iii) Difficulty for final beneficiaries to organise themselves and make available financial means to ensure a regular maintenance programme and unexpected repair of infrastructures: local ownership by the beneficiaries is traditionally viewed as the capacity to mobilise labour to ensure maintenance; however, with more extreme events in view, the recurrence of these becomes higher, hence the need for higher construction standards but also the need to ensure financial capacity to cope with infrastructures' repairs; there is a risk that the added economic benefits of these infrastructures will not be sufficiently translated by the final beneficiaries into financial resources to ensure long-term infrastructures sustainability.

These risks, although analysed *a posteriori*, have had significant constraints for the project (see findings and in particular sustainability).

3.1.3 Lessons learned from other projects incorporated into project design

The LDCF2 took into consideration the lessons learned from other projects both in terms of intervention approach and sectors to consider:

(i) Many donors and the Government support the water and sanitation sector in the selected provinces including the construction/rehabilitation of small-scale rural infrastructures (SIDA, UNICEF, CARE, Concern, Red Cross, WB…) through numerous projects

(ii) Often, the centralised implementation approach by relevant ministries results in a dilution effect of financial resources made available at local level, which is seen by Government as a suboptimal utilisation of resources

(iii) The GPAR programme supported small-scale infrastructures in the water sector in the incumbent provinces but using a more efficient decentralised implementation approach (direct spending at district level through a fund - DDF-).

A common issue of these current and past interventions is the low durability of infrastructures for reasons linked to superseded standards of construction in relation to the current trend of accrued occurrence of more extreme events and the lack of a sustainable M&R policy which may be linked to the lack of perceived value addition in terms of economics and beneficiary participation (ownership) in relation to these infrastructures.

These resulted in the design of a project that had to integrate the following:

- Invest in infrastructures that are durable through higher standards of quality (climate proofing), maintenance/repairs policy (ownership), ensuring capital investment protection with an ecosystem based adaptation approach at watershed level
- Design a project that will primarily benefit the participating districts through using the same decentralised implementation approach as for GPAR (more efficient and effective implementation)
- Make sure that the infrastructures have a high enough RoI so as to create sufficient wealth to reduce the poverty level of the targeted populations (pro-poor policy), generate financial resources and community appropriation for their maintenance.

3.1.4 Planned stakeholders' participation

The planned stakeholders and an estimate of their actual contribution to the project are indicated in Table 3.

The actual core stakeholders of the project in addition to the final beneficiaries (villages' communities) are at national level MoNRE, MoHA and within the selected provinces DONRE and DOHA. As mentioned above, MoNRE was responsible for the outcomes 1 (climate proofing capacity building activities) and 3 (EbA activities) while MoHA was implementing outcome 2 (infrastructures construction through DDF mechanism) with their representatives at provincial/district levels actually implementing the activities as required.

Overall, the final beneficiaries were very receptive to the project with active participation in awareness raising sessions, feedback and discussions on the potential benefits of the project.

The involvement of the provincial level was overall adequate with anticipated supervision and monitoring of activities implemented by district authorities. This would have been most critical as the provincial level had substantially more technical expertise than district levels.

It is surprising to see that MAF's contribution was very limited (only at board level) while a large proportion of the infrastructures' rehabilitations were to benefit farmers through increased irrigation areas or farming intensification during the dry season.

Key institutions / stakeholders	Outcome 1	Outcome 2	Outcome 3	Active Board member

MoNRE	✓		✓	
MoHA		✓		✓
MPI				✓
MAF		×		×
PONRE/DONRE	✓	✓	✓ (not as expected)	
District Development Support Committees	✓	✓	×	
River Basin Committee			×	
Local decision makers (village representatives, local mass representatives)	✓	✓	✓ (partially)	
Development partners (WB, UNCDF, ADB, GIZ…):	-	-	-	
Lao Women's' Union		✓ (at local level) × (at national level)		
NGOs	On a contractual basis			
Service Providers (consulting firms / construction firms)	On a contractual basis			
✓: participation as planned; ×: no/little evidence of participation as planned ; - not reviewed				

Table 2: Planned / actual stakeholders participation

3.1.5 Replication approach

As mentioned in the PRODOC, the potential for replication of the intervention is very high:

(i) The project is linked to the National GPAR programme which is part of the Government strategy to deconcentrate responsibilities to the subnational level.

(ii) The thematic, while being implemented in the 2 provinces of Sekong and Saravane as they are most prone to extreme climatic events, can be applied just equally in any other province of Lao DPR.

(iii) The adopted methodology to integrate climate proofing in existing procedures is relatively straightforward as it implies upgrading existing procedures and practices

(iv) The project has wagered on policy influencing to upscale similar interventions or projects that might adopt a similar approach to development

Still, it is even more important to enable the right conditions for replication by 1. empowering central Government in adopting a nation-wide legal framework for climate proofing infrastructures and integrating EbA approaches to rural infrastructures, 2. dedicating time and resources on policy influencing (as mentioned above under (iv)).

It is hard to see that the project did provision enough activities and resources for that purpose; it is the opinion of the team that a component for that purpose was missing in the PRODOC (see lessons learned).

3.1.6 UNDP comparative advantage

UNDP has been committed to building up the capacity of the country through mainstreaming environmental and climate change related considerations in the development processes at national, subnational and community levels.

The main advantage of UNDP is its capacity to mobilise financial resources on behalf of Lao DPR and to prepare with the Government project proposals that are endorsed and implemented.

The UNDP's comparative advantage is several-fold: (i) UNDP is a neutral platform for development and has been able to build a trustful relationship with Government; (ii) UNDP is seen by Government as a multipurpose agency that favours a multisector approach to development while other (non-)UN agencies/donors are more sector-based (UNDP is active in most sectors like agriculture, economy, energy and mines, finance, governance…); (iii) UNDP's strategy favours a pro-poor approach focussing on the most vulnerable – a focus on the population living under the poverty level - while many other donors will support large-scale interventions that will benefit large swaths of the population; (iv) UNDP will support preferably small-scale investments (e.g. small scale rural infrastructure under this project) benefitting primarily isolated and vulnerable people instead of large scale nation-wide infrastructure programs; (v) UNDP has the ability to bring together specialised UN agencies for a common intervention.

Under the Laotian context, UNDP has acquired extensive experience with GEF through implementing over 6 GEF-funded interventions, all of them under the climate change focal area and has lead with UNEP the PEI that supports the integration of environmental concerns of poor and vulnerable groups into policy, planning and implementation processes for poverty reduction, pro-poor growth and achievement of the MDGs.

Finally, UNDP can bring valuable expertise – including directly through its country office HR – in RBM & efficient M&E methods to support interventions' implementation as a mean to raise implementation efficiency and effectiveness. This is most crucial as the Lao DPR staff capacity at the subnational level is limited. UNDP's support is also valuable for optimising projects' annual planning exercises during Board meetings.

3.1.7 Linkages between project and interventions within the sector

The project design took into consideration other existing interventions:

- The 'Poverty Reduction Fund' implementation method is similar to this project with direct access to budgets for small infrastructures but they do not integrate climate proofing yet
- The 'River Basin Committee support' projects could benefit from this project as well as they do not take into consideration climate change adaptation requirements
- The 'National Integrated Water Resources Management Support Program' supports data collection in the area of IWMR which might be critical for this project for the design of upgraded small-scale infrastructures (infrastructures design calculations)
- The 'Capacity Enhancement for Coping with Climate Change Project' has supported the development of climate change working groups mostly at national level but with some developments at the subnational level and would have brought lessons learned on the effects and effectiveness of project implementation at both national and subnational levels
- The 'Land Management – Rural Economic Development Project' has worked on revising the national guidelines for district planning including mainstreaming climate change aspects into district planning processes
- The World Wildlife Fund was subcontracted by the WB to assess the national Ecosystem-based Adaptation framework

- The 'Enhancing Agriculture Resilience' project contributed to increasing the knowledge basis on climate change and its impact in relation to agricultural production, food security and vulnerability, including in the Sekong province

Still, it remains to be seen how climate proofing could be integrated into routine Government and donor-funded initiatives while the project did not include a policy component focussing at national level.

3.1.8 Management arrangements

The 4-year project has been implemented under UNDP's NIM modality (eventually extended by one year).

The planned management arrangements as per PRODOC are illustrated in the organisational chart shown in Figure 1.

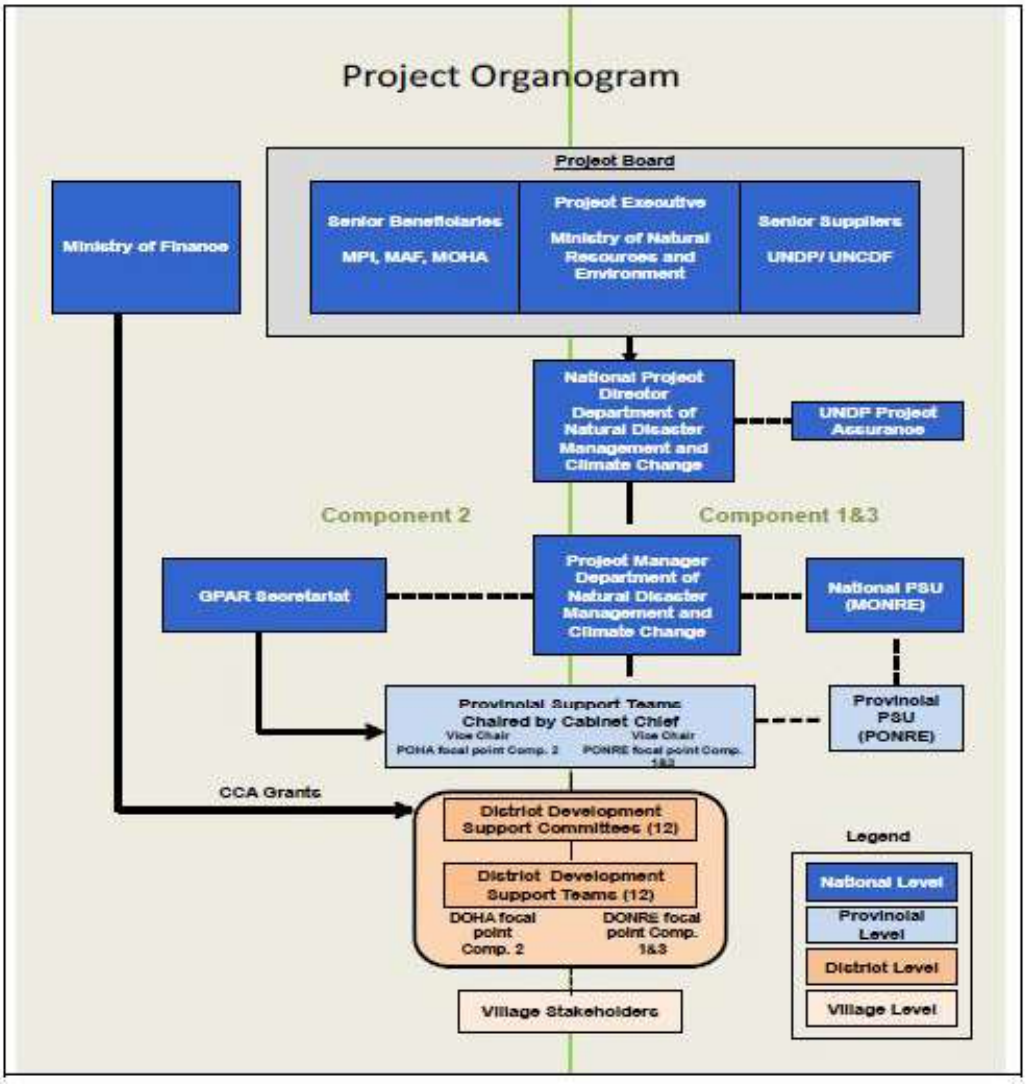


Figure 1: Planned project organisational structure

With the overall responsibility of the project laid with MoNRE, the implementation arrangements of the project were the following:

- Project Board assessing periodically the execution and performance of the project and possibly address unresolved issues presented by the Project Manager
- National Project Director for overseeing the overall project implementation and ensuring that the project and outcomes are achieved
- Project Manager running the project on a daily basis(management, administration, coordination, technical supervision…), ensuring that the project's results will be achieved
- GPAR Secretariat under MoHA in charge of outcome 2, ensuring that all the activities and infrastructures' funds are carried out and made available in due time
- National PSU under MoNRE supporting outcomes 1 and 3

There were no significant modifications of the project structure during implementation despite coordination issues encountered by the stakeholders.

3.2 Project implementation

3.2.1 Adaptive management

The project under the NIM modality was due to be implemented from December 2012 to December 2016. Mobilisation of HR was slow with a 6 months inception phase actually starting 6 months late (May – October 2013). It culminated with an inception workshop conducted by the end of Year 1 (November 2013) focussing on stakeholders' understanding of the project's goal, results, planned activities and the NIM modality.

The project was significantly constrained at the start with much delayed initial recruitment processes (e.g. international advisor) resulting in little or no activities implemented during 2013 (Year 1). In addition, successive resignations and recruitments further slowed down the implementation (EbA advisor, infrastructure advisor, M&E specialist).

The governance structure of the project was the following:

- *Annual meeting* (Board members: UNDP, MoNRE, MoHA, MPI, MoA, UNCDF): the project implementation was based on AWPs formulated by the project team and reviewed/endorsed by the Project Board. Annual planning was divided on a quarterly basis as per log frame structure.
- *Quarterly meetings* (UNDP, the project team [MoHA and MoNRE] and UNCDF) to (i) review the delivery of activities as per annual/quarterly plans, (ii) plan activities for the next quarter and (iii) monitor the delivery rate (quarterly project financial transfers authorised when the delivery rate is > 80%). Fund advances authorisations experienced significant delays from a normal 2 weeks lag to more than 1 month, principally due to a slow internal clearance system within MoNRE. There were also delays in the production of UNDP's CDR. Once budgets were approved, there were no more delays transferring the funds from central to provincial/district level.
- *Monthly meetings* (UNDP, the project team [MoHA and MoNRE] and UNCDF): to discuss technical issues and coordinate activities between stakeholders.

The monthly meeting was the main governance body for the day-to-day analysis of the project; the Project Board was merely the officialising decision taking body; minutes confirmed that most technical issues were solved during the monthly meetings.

Delays affected the implementation of the project with activities postponed or sometimes cancelled (e.g. workshops); seasonal activities were also affected (e.g. grass/tree replanting postponed from one rainy season to another).

A 12 months no-cost extension was granted due to slow delivery, just before the MTR (see feedback from M&E). Based on the review of project achievements, the evaluation found that the project worked towards project goal, objectives and outcomes but the due linkages between component 2 and 3 were not achieved as expected.

Still, the overall focus of the project (project goal, objective, and outcomes) remained unchanged over the whole project period; quantitative results were however modified to reflect better the capacity to deliver outputs.

3.2.2 Partnership arrangements

While there was little evidence of official partnership arrangements during implementation, the project worked in close collaboration with (i) the GPAR Secretariat/UNCDF to ensure a smooth delivery of funds through the DDF mechanism, (ii) the Ministry of Agriculture at local level through DAFO to support the design of irrigation/agriculture-related infrastructures, (iii) the ministry of transport for road-related infrastructures. It was unusual to see that there was little or no technical support from central level by the ministry of agriculture or transport.

The partnership with IUCN eventually did not materialise: the anticipated CRVA study could not be granted to IUCN as an open bidding process had to be undertaken. It was eventually won by a specialised consulting firm based in Vietnam (ICEM).

The partnership with UNCDF consisted of financial monitoring of DDF grants while the actual monitoring of results was carried out by the GPAR Secretariat as part of the project's regular activities.

3.2.3 Feedback from M&E used for adaptive management

Feedbacks from regular monitoring and evaluation of the project as well as from UNDP oversight were incorporated into changes of planned project activities, results and log frame by early Year 3 just before the MTR; these consisted of the following:

- Reduction in the number of infrastructure projects: from 48 (4 x 12)[2] projects, to 28 (4+12+12)[3] projects: with extensive delays in Year 1 and 2, it soon became evident that the original 48 infrastructures' objective was no longer achievable
- Inclusion of ecosystem considerations into the CRVA process
- Change ecosystem indicators: from 'area of ecosystems' to 'number of EbA interventions' /'number of micro-watersheds': the initial PRODOC called for extensive linkages of outcome 2 and 3 covering significant areas; initial infrastructures constructions showed that (i) not all infrastructures required an EbA response and (ii) funds for outcome 3 were too limited to ensure large area protection as planned in the PRODOC

[2] 12 projects per year for 4 years

[3] 4 projects on Year 3, 12 on Year 4 and 12 on Year 5

- Project Extension: from Dec 2016 to Dec 2017 in order to reflect the extensive implementation delays and change in the number of rehabilitated/new infrastructures

3.2.4 Project finance

The total cost of the project (including Q3 2017) from 2012 to 2017 is explained under Table 3.

Co-financing (type/source)	UNDP CO (mill. US$)		IUCN (mill. US$)		GEF (mill. US$)		UNDP parallel (mill. US$)		Government parallel (mill. US$)		Government in-kind (mill. US$)	
	Planned[4]	Actual[5]	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	planned	Actual
Total	0,28	0,24	4,15	?	4,70	4,43	21,86	?	4,21	?	0,38	?

Table 3: Planned vs actual project expenditures[6]

As with other GEF projects, there is no recording of actual spending by co-financers; hence it is not possible to assess their contribution. This is mostly due to the fact that the project finance officer has no leverage to collect any data from other interventions.

Table 4 shows that the project initial operationalisation was spread over 2 years (2013 and 2014) with a PRODOC much too optimistic about project resources mobilisation: a lot of assumptions were made at project formulation stage like immediate infrastructures construction by Year 1, DDF updated guidelines at the start of the project; this was clearly unachievable. It became evident by 2015 that a project extension was needed (0,70M$ spent against 2M$ planned as per PRODOC in 2013/4).

Budget/expenditure[7] / Year	PRODOC work plan	AWP (mill. US$)	Actual expenditure (mill. US$)	% spent (actual/AWP)
2013	0,62	0,07	0,16	>200
2014	1,38	0,56	0,54	96
2015	1,56	1,78	1,68	94
2016	1,43	1,68	1,73	103
2017	-	0,90	0,56	62

Table 4: Annual Work Plan budget and actual expenditures (UNDP & LDCF)

The delivery rate has been well controlled (around 100% in 2014, 2015 and 2016) and interviews showed that this trend would continue for 2017, implying a good financial management system and planning capacity of the project team.

The analysis of the cumulative delivery rate (see Figure 2) show a typical S-shaped curve (sigmoid) against a straight line (linear trend) for the cumulative spending as anticipated at formulation stage; this is more evidence for the need to take into account an extended inception phase to resolve operationalisation difficulties like recruitment and initial involvement of all stakeholders, and to lengthen the project cycle to ensure a smoother implementation.

[4] Source : project document
[5] Combined Delivery Report
[6] Situation as of September 2017
[7] Combined UNDP TRAC and LDCF funds

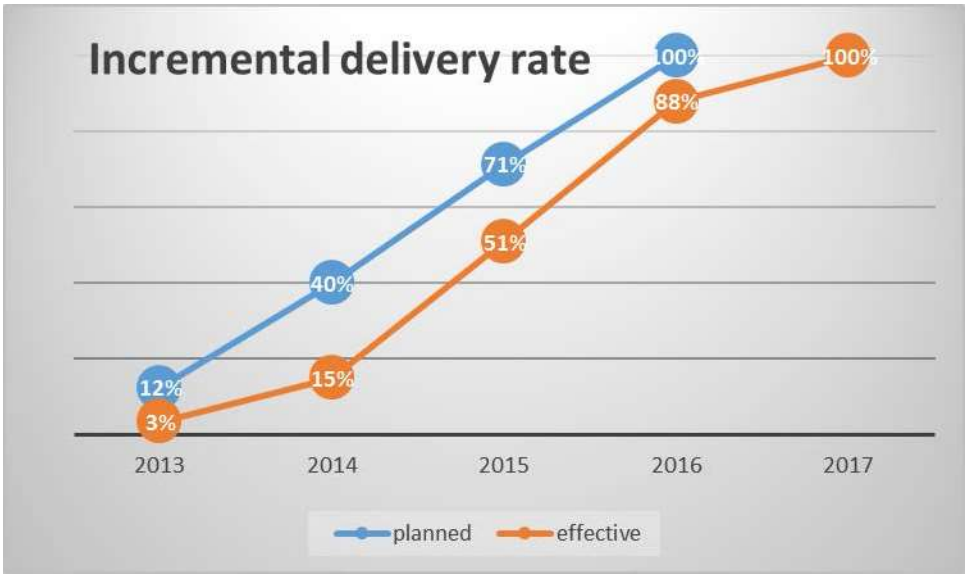


Figure 2: cumulative planned and actual delivery rate

As shown under Table 5, the financial resources allocated and actually spend are very different for outcomes 1 (capacity building +50%) and 3 (EbA -40%).

Outcome 3 was significantly constrained by the recruitment process of the project technical team members (infrastructure, EbA, international advisors) well into 2014 (over 1 year late). Combined with the different implementation approaches by MoHA (through GPAR Secretariat) and central MoNRE, it resulted in disjointed implementation of outcomes 2 and 3 with less EbA resources allocated to protect infrastructures. These were selected and rehabilitated without systematic EbA projects that were developed at a later stage. Excess outcome 3 resources were logically siphoned to capacity building activities - outcome 1 - also implemented by MoNRE.

The project management budget was contained within the planned envelope despite its very low amount (8%); more common values for similar projects have higher management budget (10-15%).

Component	PRODOC Budget (mill. US$)	2013	2014	2015	2016	2017 (excluding Q4)	Total spent	% delivery
Outcome 1 – capacity building	0,89	0,02	0,18	0,29	0,51	0,29	1,30	146
Outcome 2 – infrastructures	2,23	-	0,19	1,02	0,94	0,04	2,18	98
Outcome 3 – EbA	1,47	0,09	0,15	0,26	0,15	0,19	0,84	57
Project management	0,39	0,05	0,02	0,10	0,13	0,04	0,34	87
Total	4,98	0,16	0,54	1,68	1,73	0,56	4,67	94

Table 5: Project's fund disbursement status (UNDP & LDCF)

3.2.5 Monitoring and evaluation: design at entry and implementation

A comprehensive M&E system was designed at the start of the project. It consisted of the following:

- Inception Report with AWP and summary of the inception phase

- Annual Progress Review/Project Implementation Review (APR/PIR)
- Periodic Monitoring through Site Visits: UNDP and regional GEF staff conducted monitoring visits to assess project progress
- External mid-term and final project evaluations
- Audits as per UNDP Financial Regulations and Rules

An M&E plan was also formulated at the start of the project - based on the log frame and performance indicators - but progressively disused with subsequent changes of M&E experts. Data was to be combined under the project M&E specialist but staff rotation (at least 3 different M&E specialists were contracted) resulted in actually having 2 separate monitoring systems providing data to the project team. While this did not significantly alter the course of the project, it may have accentuated the dual (separate) approach to implementation (outcome 2 by MoHA and outcomes 1/3 by MoNRE).

A Learning and Knowledge Sharing plan (sharing lessons learned) was devised but few communication activities were carried out prior to the MTR.

The MTR conducted in 2016 rated the overall performance of the project as moderately satisfactory. The project implemented most recommendations including (i) the need to link infrastructures and EbA initiatives including the speeding up of EbAs, (ii) increase the engagement of final beneficiaries to ensure ownership, (iii) increase communication on the project, (vi) develop an exit/sustainability strategy.

A document on an exit strategy was produced with clear references to the need to mainstream project's benefits into national processes through the "Sam Sang" (decentralization) strategy, climate resilience in building codes, guidelines for ecosystem-based adaptation for rural infrastructures or as an add-on for new donor funded interventions focussing on an extended/upgraded pilot DDF mechanism.

Still, the difficulty to operate design changes during implementation has made it very difficult for the project team to (i) effectively link infrastructures and EbAs as per initial project proposal (having separate MoHA and MoNRE implementation approaches) and (ii) to implement an exit strategy other than ensuring that lessons learned are incorporated into new donor-funded interventions which should be the case as indicated below.

UNDP brought new momentum to the project in terms of communication and creating linkages between the project and new similar interventions (GPAR phase II funded by UNCDF/UNDP/SDC, Adaptation Fund project due to be implemented by UN-HABITAT) as a way to develop an exit strategy. The lack of resources to incorporate lessons learned within the institutions at central level has limited however the added value of the project in terms of Government empowerment. Regarding UN-HABITAT Project, the LDCF 2 Project was consulted to help to inform the project design before submission to the Adaptation Fund.

M&E design at entry RATING: *Satisfactory (S)*

M&E at implementation RATING: *Moderately satisfactory (MS)*

Overall quality of M&E RATING: *Moderately satisfactory (MS)*

3.2.6 UNDP and Implementing Partner implementation / execution coordination and operational issues

Both UNDP and the designated IP (MoNRE) were involved in project implementation with UNDP having a supervisory and oversight role with the provision of technical advice and monitoring.

Implementing Partner:

The project was supervised by MoNRE. Its Department of Disaster Management and Climate Change (DNDMCC) hosted the project team throughout the duration of the project. DDMCC had a change of name to DCC (Department of Climate Change) with a change of mandate in 2017as the mandate for disaster response and recovery was shifted to another ministry.

One of the main characteristics of the project was the asymmetrical implementation approach by MoHA (decentralised) and MoNRE (centralised), leading to almost independent implementation of outcome 2 by MoHA and outcome 1 and 3 by MoNRE that inevitably resulted in disconnecting outcome 2 and 3 results. This is mostly due to the innovative approach of the project and the fact that decentralisation has not been mainstreamed in technical ministries. This hybrid implementation mechanism resulted in long delays when infrastructures go-ahead at district level lead by (D)OHA was waiting for technical clearance by central MoNRE. This project constitutes a testbed for analysis for combining decentralisation of functions with specific technical capacity strengthening at local level. Still, over the course of the implementation, efforts were made to correct this issue through bringing more integration between the three components.

In 2016, the disaster management mandate for response, relief and recovery was moved back to the Ministry of Labour and Social Welfare. Despite this institutional change, there was no alteration in the project's implementation as the mandate for climate change adaptation and mitigation as well as disaster preparedness remained with DCC in MONRE. The project remained with MoNRE as the Implementing Partner. Under this unique implementation mechanism, MoNRE has been able to facilitate dialogue with MoHA in order to ensure a smooth implementation of outcome 2 resulting in the upgrading/reconstruction of planned rural infrastructures. Still, the difficulty for MoNRE was the inability to implement the project as by MoHA because de-concentration of technical ministries is not on Government's agenda.

As per interviews at the subnational level, MoNRE brought very positive effects on both outcomes 1 and 3, in particular for all activities related to enhancing the technical capacity of DONRE and PONRE staff; the subnational level was much less enthusiastic about the ability of MoNRE under this particular implementation approach to effectively deliver timely results (substantial implementation delays).

Quality of implementing partner execution RATING: *Satisfactory (S)*

Implementing Agency:

The added value of the implementing agency (UNDP) in Lao DPR has been its ability to provide regular support to the project team: UNDP was present at monthly and, quarterly meetings and as a Project Board member; hence it had comprehensive knowledge of the project's level of implementation and was in a prime position to provide advice to Government for key decision making either during technical monthly meetings or during Project Board meetings.

The support of UNDP has been pivotal in enhancing the visibility of the project's results including press articles, photo-stories, collaboration with UNDP Timor Leste for South-South Cooperation, presentation at UNFCCC COP23, CRVA publications, raising awareness of the project at various fora a including the national Sector and Sub-Sector Working Group,, especially after the MTR.

Also, it contributed to supporting the formulation of new interventions (e.g. GPAR phase II 'GIDP' funded by UNCDF/UNDP/SDC that will incorporate LDCF2 results) and through its networking ability has created awareness amongst partners (donors) to emulate LDCF2 results in terms of both participatory and decentralisation approaches.

Quality of implementing agency (UNDP) execution RATING: *Highly satisfactory (HS)*

Overall quality of implementation / Execution RATING: *Satisfactory (S)*

3.3 Project results

3.3.1 Overall results

The assessment of project progress or and review of overall results of the project is presented in Annex 4. A brief assessment of project overall results is presented in the following paragraphs.

Objective Outcome: Local administrative systems affecting the provision and maintenance of small-scale rural infrastructure will be improved through participatory decision making that reflects the genuine needs of communities and natural systems vulnerable to climate risk. Progress to date: Achieved. All 12 districts in the project target area of Saravane and Sekong Provinces in Southern Lao PDR have incorporated climate risks into development plans that include specific CCA actions related to a total of 28 infrastructure projects now completed (+ one extra), informed by previous climate risk and vulnerability assessments. Specific CCA actions include both engineered and ecosystem-based adaptation actions to support climate resilient communities and infrastructure. Climate resilient water supply in Kamkok Village, Thateng district consisting of deep-tube well, water tower and distribution pipe system (engineered adaptation), and ecosystem management plan for the adjacent upstream Phu Ta Yeune mountain forest (ecosystem-based adaptation), enabling long-term protection of the ground-water resources, for example. The community benefits though a more stable, year-round water supply, as well as better protection of ground-water resources, and better protection against flash floods and erosion during the monsoon season.

3.3.1.1 Outcome 1: Capacities provided for local administrative institutions to integrate climate risks into participatory planning and financing of small scale rural water infrastructure provision.

Progress to date: achieved. Local district planners of 12 project target districts acquired necessary skills and knowledge to undertake climate change risk assessment as part of their planning routine. The CRVA method has been used during the final round of infrastructure development planning in all 12 districts. The climate risk criteria for the infrastructure investment screening have been approved by MoNRE. The climate proofing related costs have been embedded into budgets of the DDF infrastructure investment plans for 2016-2017. All 12 target districts now have the skills and procedures in place to establish climate risk reduction measures and budget and implement them through the DDF planning and funding mechanism. A number of technical trainings including project design and management and on subjects

related to climate resilient infrastructure as well as roles of ecosystem-based approaches to reduce climate change risk at a level of sub-catchment where the physical infrastructure units are or are to be located were delivered to provincial and district planners sufficiently.

Output 1.1: Technical capacity in climate resilient planning, focusing on links between improved ecosystem management and sustainability of investments in small scale rural water infrastructure, enhanced for at least 250 national, province, district and village officials, as well as other community stakeholders. This output is designed to enable all other project Outcomes and Outputs by building in the necessary understanding of climate risks to strengthen local development planning from the project outset. The approach taken will be to build directly on the initial capacity assessment carried out during the PPG phase, and convert this into a detailed and fully costed capacity development plan. It will also provide a key collaboration point with the baseline ADB supported IWRM program which is providing capacity development for IWRM at both national and province levels, largely the same audience of individuals. In response to recommendations from the Environmental and Social screening, environmental and social risk considerations and assessment methods will also be incorporated into the government capacity development and training plans. Progress to date: Completed, 70 (10 females) provincial and district officers received on-the-job training on CRVA. 144 (22 females) District and Provincial officers from 12 districts of Sekong and Saravane provinces have been trained on the implementation small scale infrastructure through the training workshop on the revised five number DDF-CR guidelines (Performance Assessment Manual DDF-BBG and DDF CR Grants, CR Grants allocation, Planning, Financial management, implementation)

Output 1.2: Village level water harvesting, storage, and distribution infrastructure adaptation solutions (with associated ecosystem management options) identified, prioritized and integrated into district development plans. This output supports the annual planning exercise carried out by the District Development Support Committees. It will provide technical and organizational inputs to be arranged and delivered by MoNRE and its province and district level structures. It will help districts to secure an additional financial envelope for climate resilient investments, which will be delivered annually to districts bank accounts set up under Outcome 2. It will also provide the starting point for more detailed subsequent field analysis through CRVA, to be carried out under Outputs 1.3 and 1.4. Annex 8 already provides an initial list of potential adaptation solutions derived from the macro V&A analysis exercise carried out during the PPG. While these are not mandatory investments they demonstrate the most likely areas for climate resilient investment and districts may choose for some to be carried forward into detailed design, as presented. Progress to date: Completed. All 12 target districts have integrated climate resilient planning and projects into their district development planning. 37,049 villagers (18,412 female). They are the direct beneficiaries of the projects and will benefit from increased crop production, reduced crop loss due to flooding and drought, climate resilient water supply, and avoided flooding impacts which will contribute to disaster reduction and improve livelihoods through adaptation to climate change.

Output 1.3: Climate risk, vulnerability and adaptation assessments (CRVA) carried out at 48 project sites in 12 districts of Sekong and Saravane provinces and proposed climate resilient investments adjusted to take account of site specific adaptation concerns. This will support the detailed engineering design of the approved climate resilient investment projects. A fundamental premise is that adaptation solutions are location specific. While there is some value in generic or 'model' solutions they will always need to be fine-tuned to physical, environmental and social realities on the ground. In some cases this will lead to an adjustment upwards in financial resources. In all cases the process of introducing and revising an approach via CRVA, will increase local ownership and ultimately the long term sustainability

of the investment. Environmental and social screening questions should be incorporated into the CRVA process and tools used to review the small infrastructure projects as they are developed to ensure project impacts are properly considered and also take into consideration the cumulative impacts in the context of wider activities in the area. Progress to date: Completed. All 12 district development plans include climate resilient projects. 37,049 villagers (18,412 female). They are the direct beneficiaries of the projects and will benefit from increased crop production, reduced crop loss due to flooding and drought, climate resilient water supply, and avoided flooding impacts which will contribute to disaster reduction and improve livelihoods through adaptation to climate change.

Output 1.4: Detailed climate resilient project investments finalized and tender documents prepared in 12 districts, as well as associated dialogues to facilitate the implementation of annual district investment plans in 12 districts. Following on from fine tuning and building local acceptance and ownership, so investments will need to be tendered to contractors for which additional professional technical services will be required. In order cases this expertise will be found at the community level and the resources can be channelled directly from the district level against an agreed work plan and set of deliverables. Progress to date: Completed.

3.3.1.2 Outcome 2: Incentives in place for small scale rural infrastructure to be protected and diversified against climate change induced risks (droughts, floods, erosion and landslides) benefiting at least 50,000 people in the 12 districts of Sekong and Saravane provinces.

Progress to date: achieved. Over 37,000 men and women in the target 12 districts benefited from 29 climate-resilient infrastructure projects completed during the reporting period. They are: Irrigation system upgrades up to climate proofing standard (14 projects), climate resilient water supply (7 projects), flood gate improvements (2 project), community bridge (4 projects), and check dam upgrade (2 projects). These investments now secure safe and uninterrupted supply of irrigation and freshwater, improved flood protection and connectivity and mobility of residing population in the face of intensified hydro-meteorological hazards. The project has helped revise the DDF guidelines adding the climate risk elements and resilience performance criteria to facilitate the district and provincial planners and decision makers in the process for preparation and review of provincial/district plan proposals.

Output 2.1: An incentive mechanism, rewarding districts performing well in planning, budgeting and implementation of climate resilient, ecosystem based small-scale water infrastructure is developed, tested and under operation to drive the delivery of LDCF climate resilient infrastructure grants. This output will result in the tailoring and extension of a pre-existing local development fund mechanism (the District Development Fund) to incorporate all the necessary skills, and capacities to channel and report on additional climate adaptation funding through national systems. Through this approach the project seeks to ensure that the project can be easily replicated in other districts and can provide a means to access and channel other public resources in the future, both national budgetary resources and international funds. Progress to date: Completed. Revised DDF Guidelines including climate resilience considerations and criteria have been approved by the Project Board in December 2015. The five number of the revised District Development Fund (DDF) guidelines with the integration of Climate Change and Resilient have been official endorsed by Ministerial Agreement by MoNRE, issued No. 4654/ MoNRE, dated 8 September 2016

Output 2.2: At least 48 small-scale infrastructure investment projects (1 per district per year), including

components of water harvesting, storage, distribution and/or irrigation of the priority lists that have been CRVA assessed are implemented benefiting 50,000 people. Output 2 will follow a phased approach. In the first year 12 infrastructure investments will be selected from the V&A report for further analysis and funding, applying the detailed CRVA approach. From the second year onwards the selection of investments will follow the same technical approach (V&A and CRVA) but influenced also by the newly established performance based mechanism leading to differing levels of financial allocation from one district to the next. Progress to date: Completed. In 2015, four infrastructure and two EbA measures have been piloted in Sekong and Saravane (two projects per province). In the following year, 12 infrastructure projects have been completed, and an additional 13 projects have been completed during 2017. As a result, 37,049 (18,412 females) villagers get direct benefits from these projects.

3.3.1.3 Outcome 3: Natural assets (such as wetlands, forests and other ecosystems in sub-catchments) over at least 60,000 ha are managed to ensure maintenance of critical ecosystem services to sustain critical rural infrastructure, especially water provisioning, flood control and protection under increasing climate change induced stresses, in Sekong and Saravane provinces.

Progress to date: Partially Achieved. In total, the project intervened in 9 sub-catchment areas covering an area of 30,387 hectares to restore the vegetation, reduce/arrest soil erosion and stabilize the slope. The project provided district planners a specialized training in EBA methods of risk reduction and conducted some awareness activities on importance of EbA for local communities that their livelihoods are strongly associated with the health of these selected critical ecosystem.

A new version has been approved of the "Manual for the Assessment of Districts' Performance under the SCSD Program – District Development Fund (DDF), MoHA-SCSD Guideline No 07/2012", to include requirements for the climate resilience grant system.

Output 3.1: Up to nine ecosystem management and action plans with a coverage of at least 60,000 Ha to protect 48 small-scale climate resilient rural infrastructure projects are designed, implemented and monitored for effectiveness (revised down to 28 infrastructures). The management and actions plans, which will include budgeted field-based activities, will be developed during Year 1 and progressively implemented from Year 2 onwards through specific interventions on the ground, which will be selected and designed using the existing local planning dialogues and structures. This work will be carried out in close coordination with the ADB-IWRM planning being carried out for Sekong River Basin in the South. Progress to date: 29 completed construction works and 9 EbA related infrastructure projects and there are 18,412 people getting benefits from these watershed areas. Two ecosystem areas were identified in 2014, and the work on the development of ecosystem management & rehabilitation plans for both areas initiated with a participatory land use planning process, in collaboration with Department of Land Planning and Development (DLPD) under MoNRE completed in 2015. The CRVA process include an identification of ecosystem-based adaptation options for each infrastructure project, and this was the basis for further selection of ecosystem sites and EbA measures. In June 2016 an appropriate EbA measure was applied by transplanting the local grass (vetiver) on the earth dyke of Sa O wetland in Kongsedone district, Saravane province, to protect against soil erosion.

Output 3.2: Awareness-raising activities implemented, learning materials developed and disseminated and regular dialogues held between communities and tiers of the local administration on the linkages between ecosystems management and small-scale climate resilient infrastructure solutions. The main

aim of this output will be to provide clear guidance and direction on how ecosystem based approaches can be integrated into local development planning, using infrastructure investments as a starting point. The opportunities for achieving this are likely to vary considerably from one district to the next depending on prevailing land use and management practices. This Output will need to be delivered in parallel with Output 3.1 since it underpins the development of the ecosystem management and action plans. Much of the work will involve motivating local officials and other stakeholders to visit specific sites, view problems on the ground, and jointly identify solutions. The frequent repetition of this approach each year of the project will induce behavioural changes in the way planning is carried out, through the integration of more evidenced based information and through the involvement of a wider range of stakeholders in formulating and agreeing local plans. This work will build directly on the national water dialogues that have been carried out by MoNRE with support from IUCN. Progress to date: Completed. 146 (21 females) provincial and district officers have been trained on EbA. 685 (446 females) villagers have been participated and gain knowledge on EbA through awareness raising activities carried out by the project. In March 2016, the team assisted the local PONRE and DONRE staff of two districts (Thateng, Sekong province and Kongsedone, SLV province) to draft the EbA rule to maintain the ecosystem and the water-related infrastructure projects. The team had also done the village consultation for their feedback on its rule. After the EbA rules and regulations were developed, the teams conducted the workshop on dissemination of its rule and the combination with the raising awareness on EbA to the local peoples in 9 target villages of two districts, SLV and SK provinces.

Training was conducted for the provincial and district staff (PONRE and DONRE and other line agencies) from Sekong and Saravane Provinces who were directly involved with the EbA and rural infrastructure projects in October 2016 in Saravane province. A total of 94 participants including 17 women from various line agencies of 12 districts as well as from the project consultant team attended.

All 12 districts (Khongsedone, Lakhonpheng, Laongam, Samouay, Saravane, Ta Oi, Tumlan, and Vapi in Saravane Province, and Dakcheung, Kaleum, Lamarm and Thateng in Sekong Province) have incorporated climate risks into development plans that include specific CCA actions related to a total of 29 infrastructure projects now completed. Specific CCA actions include both engineered and ecosystem-based adaptation actions to support climate resilient communities and infrastructure. The 2017 PIR reveals that climate proofing related costs have been embedded into budgets of the DDF infrastructure investment plans for 2016-2017. All target districts now have the skills and procedures in place to establish climate risk, risk reduction measures and budget and implement them through the DDF planning and funding mechanism. The project exit strategy has been developed and put in practice as per the MTE recommendation.

Overall Project Outcome RATING: *Satisfactory (S)*

3.3.2 Relevance

As far as the relevance is concerned, the program concept and design are highly relevant to country policies, strategic objectives and priorities. The Team concludes that the Project is fully conforming to the country strategies, policies and programs related to climate change issues. This also includes all activities under the project, which are well in tune and fully aligned with the national development policy, including all three project outcomes on capacity building, small-scale infrastructure development, and ecosystem-based management.

The project is a direct response to the challenges identified in the project document. Indeed, it seeks to develop capacities for an "*Effective Governance for Small-scale Rural Infrastructure and Disaster Preparedness in a Changing Climate*". It is focusing on the removal of barriers through a 'three-pronged' approach: (i) by strengthening the national, provincial and district capacities for planning for rural infrastructure that incorporates climate considerations; (ii) by providing direct financing for infrastructure projects to vulnerable districts through the existing District Development Fund (DDF) mechanism; and (iii) by implementing ecosystem-based adaptation measures that provide additional climate resilience at the watershed level of project infrastructure intervention.

The project is also relevant in the sense that it responded to GoL priorities that are well documented in sector policies, strategies and plans. It is part of the development strategy for Lao PDR, which includes the alignment of the project with the following relevant parts:

- Sam Sang Initiative ("3 Builds") proclaimed by the Prime Minister Order 16/2012 with the objective to improve the delivery of public services.
- Five Year National Socio-Economic Development Plan VIII (2016-2020) – (8th NSEDP)
- MoNRE Vision toward 2030 (Natural Resources and Environment Strategy (NRES), 10 Years - 2016- 2025)
- National Adaptation Program of Action to Climate Change (NAPA - 2009) priority one and priority two.
- The Strategy on Climate Change of the Lao PDR (2010)
- National Governance and Public Administration Reform Program (NGPAR)

The project is also designed in alignment of GEF priority areas. GEF funds and support projects focused on climate change, biodiversity and land degradation issues. The LDCF2 project is, therefore, designed to be fully in line with these GEF priority areas.

RATING: *Relevant (R)*

3.3.3 Effectiveness and efficiency

Effectiveness (relation between actual outcomes and the project objective):

The initial project objective is to improve local administrative systems affecting the provision and maintenance of small scale rural infrastructure through participatory decision making that reflects the genuine needs of communities and natural systems vulnerable to climate risk. Three outcomes were formulated:

- Outcome 1: capacities provided for local administrative institutions to integrate climate risks into participatory planning and financing of small scale rural water infrastructure provision;
- Outcome 2: incentives in place for small-scale rural infrastructure to be protected and diversified against climate change induced risks benefitting at least 50,000 people in 12 districts of Sekong and Saravane provinces;
- Outcome 3: natural assets managed to ensure maintenance of critical ecosystem services, especially water provisioning, flood control and protection under increasing climate change induced stresses, in Sekong and Saravane provinces

Outcome 1 results: direct relationship to objective, however empowerment remains weak

The district technical staff has now the basic skills to mainstream climate change risks into planning processes: these include identifying innovative solutions to adapt to extreme climatic events and carrying out CRVAs.

They however still remain dependent on the DDF mechanism for implementation and still require external support for the actual design and technical solutions; moreover, there was little evidence that the skills were applied outside the DDF framework through direct Government implementation.

While there is theoretical understanding of the linkages between ecosystem management and infrastructures sustainability, the solutions on how to actually implement them remain somehow elusive for the district staff and even more so for the population.

Outcome 2 results: direct relationship to objective but less effective than planned

The DDF mechanism has been a very effective solution to mainstream climate change considerations into rural infrastructures: it had the advantage of direct implementation with (in theory) little or no central interaction.

However, the need to review the infrastructures' designs by MoNRE was time-consuming (long process for approval – back and forth exchanges of information to improve the designs) and somewhat cancelling the effects of the decentralisation; this process improved drastically over the implementation of the project with little modification of design for infrastructures construction by the end of the project and evidenced the effectiveness of outcome 1.

The technical oversight should in some way be applied also at local level (e.g. provincial level), hence transferring technical expertise from central level to the subnational level.

Interviews showed that the updated guidelines for climate proofing of infrastructures are straightforward but may be too tailored to the DDF mechanism and would require extensive modifications for adoption by the Government[8], an activity that was not integrated into the project.

Outcome 3 results: weak relationship to objective; ineffective as implemented by the project

Too little too late was implemented to create wide-ranging awareness on how to implement EbA measures to protect rural infrastructures.

This may have to do with the actual project design that created 2 separate lines of implementation for outcomes 2 and 3, supposedly a less complex solution because of the 2 ministries involved. The alternative of an integrated EbA-infrastructure package was not considered because deemed too complex to implement with two different ministries. This may be so but resulted in any case in not significantly improving the resilience of most infrastructures at watershed level. Another approach has to be sought to effectively link rural infrastructures with environmental protection for enhanced sustainability.

Efficiency (project costs):

The 5 year-long project spent in total 4,98M$ over 5 years (1M$/year) to upgrade 28(+1) rural infrastructures and protect up to 9 sites with EbA measures (0,15M$/subproject).

Interviewed experts considered that the infrastructures lifetime duration may well double/triple (up to 10-15 years instead of 5 years) although they will still lag way behind international standards.

[8] e.g. upgrade the construction standards to make them climate-proof

This is also a best-case scenario as it will depend on the M&R strategies put in place by the final beneficiaries and district authorities. In that case, the efficiency may depend entirely on the actual ownership and empowerment by the local stakeholders (district authorities and infrastructures committees).

RATING for Effectiveness: *Moderately Satisfactory (MS)*

RATING for Efficiency: *Satisfactory if there is evidence of a functional mechanism for M&R (S)*

Unsatisfactory if there is no evidence of it (U)

Overall project outcome RATING: *Moderately Satisfactory (MS)*

3.3.4 Country ownership

The level of country ownership for project implementation is moderately satisfactory. The project was designed to implement strategic actions outlined in the Lao Government Climate Change Action Plan (2010), the National Adaptation Program of Action to Climate Change Impacts (NAPA) 2009), the NGPES (2003), the national five-year plans (NSEDP VII for 2010- 2015 and NSEDP VIII running from 2015 – 2020). These national sectoral and development plans recognize and contain climate change adaptation and mitigation and disaster preparedness strategies and plans that were meant to strengthen and reinforce activities to effectively support effective natural resources management and livelihood programs in line with the development plans of all joined project implementation agencies. The project was designed, planned and implemented jointly by relevant government agencies with active participation of representatives from concerned government officials and civil societies and communities representatives. The project management arrangement system and procedures have been set up and implemented through not only direct involvement and responsibility of two lead ministries of MoNRE and MoHA at central level and their respective branches at provincial and district level, but also with a wide range of other government institutions and partners including MPI, MAF, MPWTC, provincial and district governors, and District Development Support Committees.

In 2013, the Ministry of Natural Resources and Environment approved the Guidelines for Ecosystem-Based Adaptation Practices in Lao PDR as an effective resilience building measure for rural communities and the Ministry of Home Affairs has incorporated the CRVA approach and performance based criteria into the DDF mechanism for deliver climate resilient infrastructure grants to districts that are totally in line with the project's objectives.

The current project supported stakeholder institutions at national and local levels to realize the ultimate goal for safeguarding of development benefits for rural communities from future climate change induced risks and sustain human well-being. With the support, institutional gaps have been addressed and the MoNRE in partnership with MoHA, Ministry of Agriculture and Forestry, Ministry of Planning and Investment were involved and demonstrated ownership at the national level. However, further support is needed to strengthen these ownerships.

3.3.5 Mainstreaming

Project mainstreaming into UNDP CPDs & UNDAF:

The project has applied a holistic Community Risk and Vulnerability Analysis (CRVAs) approach combined with poverty reduction and sustainable development to carry out the planned activities, which covered two UNDP country programs (2012-2016 and 2017-2021). The project is very well aligned with both documents. It is significantly contributing to sustainable natural resource and environmental management and adaptation to climate change under UNDP CPD's outcome 2, UNDAF's outcome 8 on climate change adaptation and mitigation, and natural disaster vulnerabilities. It is also aligned with the UNPF's outcome 3 and UNDP strategic plan outcome 5 - Countries are able to reduce the likelihood of conflict and lower the risk of natural disasters, including from climate change.

In particular, the project is directly contributing to one of the key intervention areas of UNDP on the increase of climate resilient of communities through small-scale infrastructure initiatives.

Gender mainstreaming:

The Evaluation Team found that gender considerations and ethnic group issues were acknowledged in the Project Document as important factors for success given the differentiated roles of men and women in natural resources management, disaster risks reduction and climate change resilient, and for the sustainability of the project. These considerations were especially taken into account when designing and implementing Community Risk and Vulnerability Analyses (CRVAs) at project site level, to ensure gender equal access to project resources that address the vulnerabilities and adaptation needs of all ethnic groups. Interviews showed significant changes in the daily task load for women especially (activity transfer but not role change) both for irrigation schemes and water supply systems (see gender impact pg. 49).

3.3.6 Elements of Sustainability

Sustainability is the likelihood of continued benefits after the project ends. As under GEF criteria, each sustainability dimension is considered critical, the overall ranking cannot be higher than the lowest one.

Overall project sustainability RATING: *Moderately likely*

3.3.6.1 Social & cultural risks to sustainability

Extensive efforts were undertaken to enhance project's results ownership - especially at community level -.

Community ownership is variable but in general weak: while some communities developed a strong sense of ownership in relation to the infrastructures, the approach remained very classical with maintenance carried out by the communities and repairs by Government. When there is a breakdown, communities will expect the Government to assess the situation, make the necessary repairs or even ask for a community contribution; this means that it is up to Government to take the lead in case of repairs.

Interviews showed that there was no significant mind-set change of district authorities and local communities on how to approach the issue of infrastructures sustainability. Through climate proofing infrastructures life expectancy was just extended – possibly 2-3 fold – but when damages will eventually occur, it will be up to Government to resolve the issue (see recommendations on how to change this approach)

This has to do with the development approach adopted by Government/UNDP: (i) pro-poor activities do not create enough financial resources for the beneficiaries to design a functional local M&R mechanism,

(ii) there is no indirect system to collect part of the infrastructures accrued benefits and reinject it into the sector (see socio-political sustainability).

In certain cases, ownership can be weak as well (e.g. some water supply systems with free of charge access to pumped/tap water, committees that do not meet regularly for some irrigation dams). Once communities are used to utilise freely the system or leave it unchecked, it will be very hard to reverse policy and request fee and contributions.

Under such one case of water supply system, organising the committee was delayed because additional EbA activities were expected by the end of the project, evidencing again the issue of having two separate lines of implementation and not adopting a more holistic approach to climate proofing infrastructures by combining EbA and infrastructures construction using higher standards.

There are also notable exceptions (e.g. dam with floodgates favouring fishing and irrigated agriculture) where the community can organise itself to create a repairs/maintenance fund, meaning that local resources can be eventually made available when the stakes/potential benefits are high.

Socio-cultural sustainability RATING: *moderately likely*

3.3.6.2 Technical risks to sustainability

Interviews confirmed that the infrastructures are of much higher construction standards. This does not mean that they are on par with international standards for rural infrastructures. If their lifetime is 2-3 fold increased, they are still vulnerable to extreme events and poor design as was observed on several occasions.

This brings forward the issue of local capacity to correct initial design issues or engage Government/community resources for repairs to ensure long-term use.

Such mechanism does not exist and it is on a case by case basis that issues may be solved or not, depending on (i) community ownership to resolve the issue by own means, informing authorities when there is a problem (lack of community technical capacity and financial means), willingness (priority) and capacity (logistics) of authorities to assess the issues and come up with a solution (availability of financial resources and/or community mobilisation).

This may have been a missed opportunity to design a comprehensive mechanism to ensure long-term operational readiness of rehabilitated infrastructures.

In conclusion, if the horizon is limited to an arbitrary 2-3 times longer lifetime for climate proofed infrastructures, then the technical risks remain quite low if some basic maintenance is secured. However, even these infrastructures are not immune to serious damage in case of extreme events.

Technical sustainability RATING: *Moderately likely (ML)*

3.3.6.3 Institutional and organisational risks to sustainability

The institutional risks are very high for this project because it did not include a project component specifically designed to mainstream lessons learned at central level for replication and Government empowerment (e.g. adopting a new code/standards of construction, EbA-infrastructure linkages approach…). This is why the MTR urgently recommended the formulation of a comprehensive exit strategy to ensure that benefits are not lost by project's closure.

Eventually UNDP and the project team reduced substantially these risks by supporting/encouraging the mainstreaming of the project's results into new donor-funded interventions (UN-HABITAT, GPAR

phase II). This should however be considered as a stop-gap measure because it remains entirely donor-driven and not integrated into Government policies for deconcentrating further planning and technical responsibilities to the subnational level (see socio-political sustainability).

Moreover, institutional instability remains a risk with climate change/disaster management responsibilities' transfer between ministries that can affect significantly any policy effort to integrate climate proofing into relevant institutions.

At this stage, these are the best options to ensure that the benefits of this project are useful and have some prospects of maintaining benefits over the next few years.

Still there are also some positive aspects:

- the upgraded DDF guidelines were officially approved, although there is little evidence of mainstreaming CR into Government routine procedures
- there is evidence of Government ownership for critical/strategic infrastructures with the release of national funds to complement project funds for some key infrastructures (including government taking-over of community mobilisation if needed), meaning that Government co-financing can be effective of the project's results

Institutional and organisational sustainability RATING:

Moderately likely if results' appropriation is confirmed through new donor-funded interventions (ML)

(Unlikely if there is no additional external support (U))

3.3.6.4 Economic and financial risks to sustainability

The economic and financial risks of the project are high because of the approach adopted in the project: its main focus is poverty reduction (reduce the poverty level and raise livelihood standards of final beneficiaries) through increasing the sustainability of infrastructures so that they can bring benefits on a more long-term basis for communities.

This social approach is largely valid for improving drinking water supply even though it has also brought indirectly some economic benefits (more household gardening as per evaluation interviews).

With regards to irrigation and flood protection, a pro-poor policy to development is insufficient because the potential for creating additional economic value has been largely overlooked with nearly exclusive support for the actual infrastructures. This may be logical to limit project's scope (at least for financial reasons) but complementarities with other sectors then become critical and need to be sought at project formulation stage.

The project did not support the beneficiaries in taking advantage of these infrastructures beyond traditional use to create wealth and through a feedback mechanism ensure technical sustainability in addition to creating an economic impact (e.g. support farmers through expansion / intensification, invest into new activities because of added value of flood gates (fisheries, tourism…).

Economic and financial sustainability RATING: *moderately likely (ML)*

3.3.6.5 Environmental risks to sustainability

The initial PRODOC clearly called for linking EbA measures with CR infrastructures. Due to a series of implementation issues, it was not possible to develop simultaneously projects that took into

consideration CV infrastructures and EbA measures to limit their degradation risks. Still, measures were taken *a posteriori* when most infrastructures were already completed. Interviews showed that this created some confusion on the part of both local district staff and final beneficiaries regarding the added value of these EbA measures that were seen more as project requirement (an add-on to be completed by project's end) than being part of a larger-scale strategy to ensure long term sustainability of the infrastructures.

There was little understanding in securing EbA measures after infrastructures' completion although capacity building training efforts proved their effectiveness with both district technical staff and local beneficiaries, aware of the need to link EbA with infrastructures.

This was most obvious for EbA measures taken nearly rehabilitated infrastructures (where beneficiaries are infrastructure users and have greatest responsibility on local land degradation), meaning remote environmental degradation affecting downstream infrastructures were not seen as relevant.

Environmental sustainability RATING: *Moderately likely (ML)*

Unlikely (U) for infrastructures that did not benefit from requested EbA measures

3.3.6.6 Socio-political risks to sustainability

At local level, interviews showed that autonomous decision making to take advantage of project's results (e.g. apply updated guidelines locally for new infrastructures, integrate them into routine activities) is not yet on the authorities' agenda as these still rely on guidance from the central level to use and develop/improve new concepts and initiatives. In that respect, the project has shown the limits of the Sam Sang Initiative on de-concentration and is evidence that empowerment will remain limited (hence the need for a more donor-driven agenda) as long as there is no clear policy to mainstream these project's results into Government' agenda as there might still be a perception that it is still difficult to move forward on development by combining climate resilience initiatives with economic development.

Socio-political sustainability RATING: *Moderately likely (ML)*

3.3.7 Potential impact

In this terminal evaluation, the impact of the project has been assessed in terms of changes or benefits achieved in social, economic, institutional, environmental areas as well as the changes achieved in terms of gender. An average rating for the impact was given.

Impact RATING: *Significant (S)*

3.3.7.1 Social Impact

Under component 1, a lot of activities were undertaken to raise awareness of communities (and district staff) on a number of issues (environmental degradation, accrued occurrence of extreme events, linking environmental degradation with drought/floods...). Activities were also carried out to ensure that communities are organised (through WUC and village committees) as a strategy to enhance infrastructures sustainability (maintenance mechanisms and sense of ownership) and mobilise communities to support EbA measures.

Interviews showed that there is, in general, a greater sense of community in supported communities: the project has facilitated the (re-)activation of community groups, community dialogue and cohesion

because of the need to participate in common decision-taking processes at project level (selection of infrastructure sites, in-kind contribution for infrastructures [mostly labour], support during CRVA and the development of EbA measures - full participation -).

Awareness on environmental degradation and infrastructure damage remains weak (but not the link with extreme events) and clearly additional support is necessary to support communities. There is still limited understanding of district staff in matching financial resources with CR criteria and the separate implementation of outcomes 2 and 3 did not help this process (e.g. district authorities still select infrastructures on a cost/economic basis with less attention to ensure CR, resulting in out of scope proposals that are inevitably rejected.

Social impact RATING: *Significant (S)*

3.3.7.2 Economic Impact

The project commissioned a purely economic analysis of a representative selection of infrastructures, concluding that there was a positive RoI for bridges and dams, and a negative RoI for water supply systems. This is not surprising but it did not consider indirect positive effects that the water supply systems may result into in terms of economics (less water-borne disease, more time for field works…).

For infrastructures related to agriculture (e.g. dry season rice fields, off-season vegetable production), there has been a positive impact of the intervention on poverty reduction through mainly increasing own consumption and creating surpluses for sale at markets.

The economic impact was nonetheless not so significant because farming supporting activities (expansion/intensification / diversification) were not included into the project or sought through complementarities (no income generation approach). This may be a lesson learned for future interventions as income generation is critical to ensure infrastructures sustainability and reduce pressure on environmental resources.

Economic impact RATING: *Minimal (M)*

3.3.7.3 Institutional Impact:

The impact of the project has been substantial on local institutions (district authorities and to a lesser extent at provincial/central levels).

Interviews showed a high degree of satisfaction of most if not all technical staff, in terms of capacity building activities with an increased understanding in (i) the general aspects of CR, (ii) the design of CR projects and technical specifications, (iii) upgraded standards for CR infrastructures.

It remains however very difficult to mainstream this knowledge outside of project limits.

A major issue that did affect this particular project has been the high turnover of technical staff (as well for the project team); while it may be a generic constraint outside of project's scope, it does affect negatively project's results – in particular its efficiency - and strategies need to be developed to work around this issue (e.g. support the development of a local HR policy within the State apparatus).

Institutional impact RATING: *Significant (S)*

3.3.7.4 Environmental Impact:

The environmental impact of the project remains very limited: 9 EbA measures were developed to address to reduce exposure of infrastructures to extreme events but these will likely have limited physical impact on the infrastructures as they are very area-specific.

The impact will likely be higher for EbA measures located closely to the infrastructures (immediate vicinity or within a small watershed), hence population can make the linkage between EbA measures and infrastructures protection.

Environmental impact RATING: *Minimal (M)*

3.3.7.5 Impact on Gender:

While the project did adopt specific methodologies to create awareness amongst men and women during implementation so as to generate more interest (hopefully resulting in increased ownership), the impact of the project is more obvious for the actual infrastructures:

- Travel time to carry water home from wells and ponds has been reduced, resulting in extended work in fields for women, more social interactions between women at home; frequency has been reduced as well.
- There has been also a (slight) increase in home gardening although it is difficult to assess whether the positive effects were more related to improved food security or income generation.

There was little evidence that EbA measures had any positive or negative direct effect on women.

Impact RATING for gender: *Significant (S)*

4. Conclusions, recommendations and lessons learned

4.1 Conclusions

Under conclusions are indicated the main achievements and strengths as well as shortcomings and weaknesses of the project.

The project has been ground-breaking for mainstreaming decentralised climate resilience at the subnational level in terms of:

- Design: the project was two-pronged by combining the rehabilitation of infrastructures with ecosystem–based adaptation measures
- Responsiveness: the participatory approach ensured widely accepted activities (selection of infrastructures, and ownership of the main results
- Implementation approach: an existing mechanism (DDF) was successfully used a mobilizer so as to integrate climate resilience aspects into district planning for rural infrastructures

The project however failed i) to generate enough interest at central level so as to influence national policy making and ensure government replication / empowerment and (ii) to improve the sustainability model for infrastructures that still relies on a classical approach (maintenance by beneficiary population and repairs by the State).

If the combination of CR and GPAR is a model to follow, Government's understanding is not up to par with the development opportunities that this model offers; this was however to be expected as the project did not carry out significant advocacy activities at central level to influence key decision makers to adopt this approach.

Overall, the project has been in line with Government and donor priorities but is also responding to a pressing need by populations: poor quality infrastructures combined with more extreme events result in damaged or obsolete infrastructures: the project managed to enhance substantially the lifetime of infrastructures and introduced ecosystem based adaptation measures although these were not really very effective and new interventions would require substantial fine-tuning of the approach.

With MoNRE overall implementing the project, a hybrid execution mechanism was used with centralised activity delivery by MoNRE for 2 components and decentralised execution by MoHA for infrastructures (1 component). This model resulted in a complex implementation that resulted in coordination difficulties (mainly at the start of the project), extensive delays and progressively an independent activity delivery by both ministries although critical to the success of the project was the need for combined implementation, in particular the need to link infrastructures with EbA measures: MoNRE was providing technical support from central level to DONRE/PONRE; these were therefore relying on MoNRE for approval (technical issues) of projects prior to using the DDF mechanism (fund disbursement).

Somehow, alternative mechanisms should be sought, should CR interventions be replicated again. Critical to this project's success was the collaboration between UNDP and UNCDF so as to utilise the DDF mechanism that was sponsored under a previous intervention by UNCDF.

In operational terms, the project managed to enhance local capacity of district technical staff on DDF delivery mechanism, technical knowledge on CR, guidelines for infrastructures climate proofing

construction, M&E and subsequent follow-up of final beneficiaries and benefits. As for the final beneficiaries, participation was at least adequate in most project sites but CR knowledge remained limited (possibly because of disjoint implementation of components 2 and 3.

4.1.1 Major achievements and strengths

- The CRVA approach is an effective tool for involving the population into the project and providing a bird's view on the local issues that are translated into land use plans, some relevant components of which can be funded by a climate proofing project; in this particular intervention, it came up too late for many sites that had already moved on with infrastructures that did not take into consideration EbA measures (hence, no stakeholder had an overview of the issues so as to optimise CR responses).
- Higher construction standards were used, resulting in longer lifetime (estimate 2-3X as previously); these are however not on par with international standards.
- The project produced updated CR guidelines / EbA guidelines, the earlier being approved officially by Government; however, this is only for use through the DDFF mechanism and there are no prospects to adapt the technical aspects of these specific guidelines into the national code of construction or into a generic approach CR constructions.
- The project was successful in developing inter-sectoral collaboration at district level with sector-wide staff benefitting from trainings and workshops; hence a good understanding of the issues and potential solutions for CR at district authorities' level.
- The project adopted a successful participatory approach that resulted in enhanced ownership (but actually little empowerment): communities were invited to participate in the selection of sites, design solutions and on ownership / maintenance.
- The project managed to develop an exit strategy – but just short - following the MTR's recommendations: this will ensure that the project's benefit will be mainstreamed into the next generation of decentralised DDF project (GPAR 'phase II'). Should this not have been successful, there would have been a real risk of project's achievement collapse as interviews showed that the subnational level is not in a position to unilaterally implement customised / specific approaches to development (like adapting these guidelines to the local context for other funds or donor/government sponsored interventions).

4.1.2 Key shortcomings and weaknesses

- The project sustainability model is no different from other interventions: it is expected from the final beneficiaries that they will contribute to maintenance and they expect Government contribution in case of repairs, which costs are not to be borne by the communities for lack of resources. This has to do with the project 'pro-poor' approach under which economic and income aspects are only second to poverty reduction aspects.
  The project lacked a value chain approach and did not view in a comprehensive manner the economic value of the infrastructures and the additional support required to use them to their full potential.
- While no efforts were spared to involve communities, local community stakeholders' engagement (to take advantage of the added value of these upgraded infrastructures) remained weak from the start : interviews showed that Government is still viewed as the primary carer of

rural infrastructures; this may have to do with the absence of combined economic support to the communities ; while these infrastructures do raise their living standard, they do not generate enough (financial) benefit to the point that it becomes unacceptable to let them degrade and have their economic situation reverse back.

- The project lacked a communication strategy: after the MTR, a lot of activities were carried out for this purpose; these however did not fit in a project communication plan (i) towards the general public to ensure empathy and create provincial / nation–wide discussion on CR, that in turn would leverage any effort by the project by influence policy making (should there have been project component on creating an enabling environment at government level to take advantage of projects' technical / methodological / policy making benefits – which there was not) and (ii) towards the Government for the same as above mentioned (advocacy / influencing policy making).
- Project staff retention has been particularly low: delayed recruitment processes and changes of staff are the norm both at project level and within Government institutions; this, however, can have dire consequences in project context and should be taken into account at formulation stage; this may have exacerbated coordination difficulties between the two executing agencies (MoNRE, MoHA) resulting in disjointed implementation of activities at district level. An issue that is often overlooked is the need to adjust the job description to the level of remuneration (with complementary training/accompanying measures if necessary) and avoid selecting overqualified staff for the sake of value for money as it inevitably leads to staff migration.
- While in operational terms, the project has been very successful in taking advantage of all the available resources to ensure project results to the best extent possible, the question remains how the benefits will survive the project's closure: interviews showed that there was no appropriation at central level of the key results of the project and that eventually, the project's results would be integrated into a new GPAR programme; this does not resolve the issue of actually mainstreaming the project's benefits (CR guidelines, changes in construction code, new policy on EbA…) into the relevant institutions for their own use and adaptation to the national institutional context ; financial support of DCC/Disaster management to divulge project benefits to MoNRE other departments and other ministries might be an approach to explore in the future.

4.2 Recommendations and lessons to be learned

The chapter was structured in (i) lessons learned in terms of design, implementation and M&E, (ii) potential actions to follow-up and reinforce the initial results of the project and (iii) proposals for future actions / interventions.

4.2.1 Lessons learned for the design, implementation, monitoring, and evaluation of the project

Design:

- In order to avoid severe coordination issues, the implementation approach should be similar for all executing parties; an hybrid implementation mechanism (decentralised DDF and centralised technical support) is not an option; should decentralised implementation be the model to follow, other critical implementation activities should be decentralised as well (technical advice,

technical design approval, staff/consultant recruitment…), meaning that the central level role should no longer be involved in technical decision making and its technical role be subordinated to clear requests from the subnational level (and no longer the other way around) ; central level's contribution should be limited to an overall supervisory role ensuring adequate coordination between all stakeholders, provisioning the required expertise on demand to the subnational level.

- In the same vein, a more simple delivery mechanism should be considered: one ministry in charge and satellite ministries with their own budget delivering technical advice; a 2-headed implementation should be avoided at all costs.
- A formal communication strategy at formulation stage has to be included in project design (with relevant financial resources) ; it should be targeting both the general public and Government so as advocate for project's results mainstreaming into relevant institutions
- The lack of an institutional component to facilitate Government empowerment can limit significantly a project's impact: as this project is focussing on new methodologies, approaches and uses innovative implementation mechanisms, it is fundamental that Government is empowered with its benefits so that it might in turn take advantage of the project results added value and transform into relevant policy and mainstream it into relevant institutions if necessary; therefore, a full scale project component on mainstreaming lessons learned and good practices into Government (policy making and adoption of routine activities) is necessary for these kinds of projects: e.g. create an enabling environment for policy making & appropriation of results at central level.
- An exit strategy should include the following: (i) ensuring infrastructures' sustainability through quality criteria', beneficiaries ownership and economic development / income generation for M&R and (ii) empowering central Government for replication and mainstreaming into amended/upgraded policies and strategies through mobilising Government to ensure advocacy).
- A more holistic approach to ensure sustainable climate proofing of infrastructures should be considered through exploring the potential for complementarities between donor-funded interventions: agree on common intervention areas/districts for enhanced impact: e.g. WB/IFAD for economic (income generation) aspects; UNDP for social/climate resilience aspects.
- Government contribution has been limited in the project to regular co-financing (premises and HR); field visits showed that substantial Government contribution for infrastructures is possible as long as they are considered critical. Hence, future interventions should ensure that government contribution for the DDF mechanism is secured at least for strategic infrastructures.
- The project commissioned CRVA that resulted in the drafting of LUP; new interventions should ensure that these plans are indeed implemented through the project and with external funding if necessary (necessity to seek complementarities) or their scope reduced to ensure that they are implemented with project's limited resources, so as to avoid creating community frustrations.

Implementation and M&E:

- Community engagement has to be initiated at the start of the project and sustained all along: this requires participatory selection of priority infrastructures with definition of responsibilities of community / Government and the need for formal community engagement agreements to ensure maintenance / repair policy agreed by all parties
- The implementation approach should be modified so as to integrate EbA + infrastructures as one package (preferably through infrastructure clustering under fewer EbA projects): this will facilitate ownership by communities of EbA/infrastructures, decision taking for grants approval

will be swifter and no longer depend of different decision taking levels (no need to ask central team to assess); technical support (using guidelines, design issues…) would be requested on demand only; as a complementary measure or as an add-on, the economic aspects of the package would need attention so that beneficiaries can create enough income so as to change their livelihoods and generate enough financial resources to implement a M&R program.

- The current project M&E system has been moderately satisfactory at best; in addition to quantitative result indicators, there needs to be included indicators on the quality of infrastructures (e.g. # of incidents 1-3-6 months after completion) and on ownership/empowerment by Government (e.g. creation of commissions to review policies, working groups to assess results integration into relevant technical ministries, new laws drafting…) and communities (e.g. # of WUC meeting by 1-3-6 months with meeting quality indicators, $ contributed, # of visits to monitor infrastructure/to district authorities to report issues…). In case of economic components, relevant indicators should also be integrated into the intervention.
- The monitoring of activities (M&E) needs to be strengthened substantially both during and mostly after infrastructures completion; at district level, there needs to be a cultural change from activity monitoring to RBM so as to focus on the essential and avoid multiplying monitoring efforts that are of limited value (e.g. # of trees planted → tree density after 1y planting).
- Future interventions should pay more attention to improving the project information system within the State apparatus; interviews showed that information sharing remains limited to the official Project Board, project team and direct implementers; other institutional stakeholders (ministries) may have difficulties in accessing information and taking advantage of it and somehow a quality interaction mechanism (regular inter-sectorial meetings / external communication workshop…) may be missing for non-directly involved but still relevant technical departments to get acquainted with the project and possibly gain indirect benefits through improved information sharing.

4.2.2 Actions to follow-up or reinforce initial benefits from the project

- **<u>Action #1</u>: Integration of CR guidelines into new generations of development projects:**

While it may not be on par with international standards, CR guidelines have the potential to increase substantially the lifetime of infrastructures, in particular when they are tied to EbA measures. First, there should be stakeholders-wide recognition on (i) the need for CR combining EbA measures when infrastructures are dealt with within development projects and (ii) the accrued costs that it usually entails. Second, there should be a consensus amongst Government and the donor community on the necessity to use these particular CR guidelines for infrastructures in Laos when development projects are being implemented. As a first step, MoNRE and new project's teams should make the necessary adaptations for implementation within their own interventions. This can be carried out nearly immediately with 2 interventions that are about to initiate in 2018:

1. GIDP funded by UNCDF, UNDP and SDC, and
2. "Enhancing the climate and disaster resilience of the most vulnerable rural and emerging urban human settlements in Lao PDR" project funded by the Adaptation Fund and UNHABITAT.

Further discussions (lobby by UNDP) are then needed with MoNRE to set up a mechanism that ensures CR and EbA measures are checked in when formulation teams (from any donor) step in for the design of new interventions (e.g. MoNRE checklist ticked if the intervention proposal is to be accepted)

- Who is taking the lead for action #1 implementation? UNDP first, then MoNRE
- Recipients: UNCDF, MoHA, UNDP itself, UN-HABITAT, MoPWT and afterwards development donors
- Need for resources?
    - Project team time to adjust work plan, move budget lines (often meaning inflating infrastructures budget lines at the expense of other lines) and secure higher level approval (e.g. project board/ formal donor agreement…) to ensure CR of intervention.
    - Staff time (MoNRE and UNDP) for advocacy an lobbying CR guidelines integration into donor's project cycle
    - Financial resources (consultant) or in-house staff (?) if MoNRE wishes to go ahead with the development of a CR checklist when infrastructures are involved in the design of new development interventions.

- **Action #2: Integration of DDF CR guidelines in Government' routine plans and actions:**

If the new GIDP is being implemented as planned, efforts should be made to integrate CR into routine tools and methods through the DDF; however, more efforts should also be made to empower government with the actual benefits (both technical like CR mainstreaming through guidelines and methodological like decentralised district planning) of the project.

Mechanisms should be devised so that updated guidelines can be applied to other donor/Government-funded infrastructure projects through advocacy both at donor and Government levels. This issue should be discussed through the establishment of a commission / inter-ministerial working group on how to apply CR measures related to infrastructures within each relevant sector (health, transport, education, agriculture…); this could be the first step for defining new construction standards more in-tune with accrued likelihood of extreme events.

- Who is taking the lead for action #2 implementation? MoNRE
- Recipients: MoHA, POHA, DOHA, PONRE, DONRE and other ministries
- Need for resources?
    - Staff time to discuss with relevant department's head within ministries
    - Transport, DSA, financial resources for workshop organisation when discussions are lead at provincial level and if consultants are needed on analyse how to actually mainstream these guidelines (e.g. adapt them to other ministries)
    - Financial resources for consultant team to support the development of new construction standards with relevant ministries

- **Action #3: Sharing the benefits/added value of CRVAs with relevant stakeholders**

CRVA basically provides an integrated sequential approach to responding climate change infrastructures' vulnerability through (i) climate and (ii) vulnerability assessment, prioritising the most (iii) vulnerable assets and support (iv) planning and (v) implementation. What is most important is that

it provides district authorities an overview of their infrastructures' vulnerability; hence it becomes a tool for decision taking at district level should there be further centralised/decentralised infrastructures financing. Still, it seems to be the expert driven and some elements of the approach might be difficult to implement locally during the planning process. The main challenge can be referred to the low technical knowledge/capacity of local officials at provincial, district and community levels on how to apply this newly developed CRVA tool properly. Interviews revealed that the sub-national level heavily depended on support from the central level (MoNRE) and external specialists. The CRVA tool developer has anticipated this challenge and recommended the project to pay more attention on few aspects including provision further training in the CRVA methodology for government officials, development of CRVA guidelines for Lao PDR, upgrading the CRVA matrix, etc. So far, CRVA did not go beyond project activities. CRVA benefit could however be far more reaching if institutionalised as a MONRE tool for assessing climate vulnerability; an obvious advantage would be through using this methodology to further secure CR adoption nation-wide, in future interventions linked to MONRE if the ministry has mainstreamed the method as part of its mandate and routine activities.

It would be most beneficial for UNDP and MoNRE to examine which MONRE department has the mandate and capacity to ensure that CRVA logic is applied for future Government and donor funded interventions and possibly plan for more support to build capacity especially at central and provincial levels.

- Who is taking the lead for action #3 implementation? UNDP supported by MoNRE
- Recipients: internal department of MoNRE
- Need for resources?
    - MoNRE staff time to assess capacity building needs, how to mainstream the method and selecting which department has the potential to implement the method
    - Regular budget/donor resources to strengthen chosen department human resources
      (CRVAs might be directly funded within the interventions' budgets requesting it, so there would be no need at this stage for regular budgets)

- **<u>Action #4</u>: Empowering beneficiary communities to ensure follow-up of EbA measures and maintenance of infrastructures:**

Infrastructure community groups (WUC/WUA) remain weak in operational terms; interviews showed that their level of functionality is at best average (infrequent meetings, no minutes, little capacity to mobilize members, limited financial leeway…); these groups should be approached by the Small Grants Programme to ensure minimum follow-up and to strengthen them so they get more functional ; this support should focus on management capability, due diligence infrastructure maintenance and also on enforcing infrastructures / EbA regulation and guidelines.

- Who is taking the lead for action #4 implementation? DONRE/DOHA and UNDP SGP in close collaboration (MoNRE if required)
- Recipients: community leaders and Committees' members
- Need for resources?
    - District staff time to commit to field trips and formulating a small grant to be funded by UNDP SGP

  - (Possibly) Costs of a local consultant to formulate a small grant proposal if no in-house capacity (issue of English language)
  - Transport, DSA for PONRE/POHA staff to move to villages to discuss enhancing the operationalisation of committees

- **<u>Action #5</u>: Develop a district follow-up programme of infrastructures and EbA measures as part as routine activities carried out by (provincial) district DONRE:**

Additional follow-up of beneficiary communities by district technical staff remains a necessity to (i) raise communities understanding on the linkages between EbA measures and infrastructures protection and (ii) better take care of infrastructures so as to detect early on issues (avoid patching up infrastructures long after degradation took place), hence requiring the establishment of some sort of follow-up plan.

- Who is taking the lead for action #5 implementation? DONRE (possibly with lower frequency support by PONRE)
- Recipients: community leaders and Committees' members
- Need for resources?
  - District staff time to develop simple tools for awareness raising on EbA measures and infrastructures and checklist for technical visits
  - Mobilisation funds for communities
  - District regular budget resources for transport and DSA of local staff when going to the field

<u>Action #6</u>: Formalisation of infrastructures rules and regulations into official by-laws

In order to strengthen infrastructures' sustainability by clarifying rights and duties of all stakeholders involved, it should be considered the reviewing of infrastructures community rules and regulations and possibly formalise them into official by-laws (for EbA and infrastructures) and also by including the district authorities if deemed relevant/necessary, so as to provide a legal basis for establishing a M&R programme broken down into a set of activities at local/district level involving the main partners.

- Who is taking the lead for action #6 implementation? PONRE for support to by-laws formalisation(at provincial and/or district levels); DONRE in close collaboration with community committees for M&R programme
- Recipients: Infrastructures' Committee and district authorities
- Need for resources?
  - PONRE staff time to oversee the review of local guides and regulations
  - Financial resources to hire a law specialist to turn these rules and regulations into officialised by-laws
  - District staff time to validate the officialising of community/district roles in CR infrastructures by-laws
  - Staff transport, DSA and community mobilisation fund to discuss the setting-up of a M&E programme
  - Possibly additional district resources to implement activities under its responsibility

4.2.3 Proposals for future directions underlining main objectives

Future interventions have to take into account the following:

- In addition to infrastructures CR, it is necessary to integrate Ecosystem-based Adaptation measures into Government governance systems: there is still little understanding on the value of ecosystem-based adaptation measures benefits even by district technical staff as they viewed EbA as a project add-on in addition to the infrastructures' component.
- New interventions should make sure that the component on infrastructures is co-financed by Government (10-15%), this would enable more ownership and probably more commitment to ensure results and follow-up of activities
- As per Sam Sang initiative on enhancing the ownership and accountability in government governance and socioeconomic management of local administrations, new interventions also have to mainstream economic aspects into project design in addition to climate proofing infrastructures through enhanced construction and EbA measures. These new projects should integrate economic aspects to fully take advantage of rehabilitated infrastructures; so far, there is little added value from the upgraded infrastructures because the project did not mobilise resources to increase the economic multiplication effect of the climate proof infrastructures. This, in turn, also results in little capacity to mobilise funds by communities.
- The project did not manage to be influential enough to overhaul national construction codes; new interventions should make available financial resources specifically for that purpose. By extension, these upgraded construction codes should be applied to other types of infrastructures.
- Under this project, the added value of central level (MoHA, MoNRE) has been limited because of the funding mechanism through DDF; given the widely different implementation approached used by MoNRE and MoHA, new projects could consider intervention decentralisation to the provincial level; this would bring several advantages and also some disadvantages: as for advantages, it reduces the number of implementation and reporting levels and of stakeholders (less cost), hence also the coordination efforts; as for disadvantages, language knowledge may be an issue for donors as most provincial staff do not speak English and reporting may require extra funding (translations).
- New interventions must ensure that CR is advocated to the highest level so as change construction standards based on project's results both in the project's sector and for other sectors
- The project focussed exclusively on small-scale rural water infrastructures; this may be a result of the pro-poor policy adoption; however, small-scale infrastructures from other sectors can also be affected by extreme events and should be included in new interventions; this would enable ministries to better grasp the consequences of extreme events and eventually encourage advocacy for CR codes of construction.

5. List of Tables

6. List of Figures

Annex 1: Terms of Reference

TERMINAL EVALUATION TERMS OF REFERENCE

INTRODUCTION

In accordance with UNDP and GEF M&E policies and procedures, all full and medium-sized UNDP support GEF financed projects are required to undergo a terminal evaluation upon completion of implementation.

These terms of reference (TOR) sets out the expectations for a Terminal Evaluation (TE) of the **Effective Governance for Small-scale Rural Infrastructure and Disaster Preparedness in a Changing Climate in Lao PDR (PIMS 4710).** The project implemented by the Ministry of Natural Resources and Environment (MoNRE)/Department of Disaster Management and Climate Change (DDMCC).

The essentials of the project to be evaluated are as follows: (*fully complete the table below*).

PROJECT SUMMARY TABLE

Project Title:	Effective Governance for Small-scale Rural Infrastructure and Disaster Preparedness in a Changir			
GEF Project ID:	00069456		*at endorsement (Million US$)*	*at completion (Million US$)*
UNDP Project ID:	00084024	LDCF (GEF) financing:	4,700,000	4,700,000
Country:	Lao PDR	IA/EA (UNDP) own:		
Region:	Asia Pacific	Government (In kind): Government (parallel):	375,000 4,210,000	375,000 4,210,000
Focal Area:	Climate change	Other: IUCN (parallel): UNDP (parallel): UNDP (in-cash):	 4,150,000 21,856,896 280,000	 4,150,000 21,856,896 280,000
FA Objectives, (OP/SP):	Capacity building to mainstream climate change adaptation policies into development plan.	Total co-financing:	30,872,896	30,872,896
Executing Agency:	UNDP	Total Project Cost:	35,572,896	35,572,896
Other Partners involved:	Department of Disaster Management and Climate Change, Ministry of Natural Resource and Environment	ProDoc Signature (date project began):		May 2013
		(Operational) Closing Date:	Proposed: Dec 2016	Actual: Dec 2017

OBJECTIVE AND SCOPE

The project was designed to increase climate resilience of rural small-scale water infrastructure, and the communities using them, through participatory planning processes that ensures full considerations of the genuine needs of communities vulnerable to climate variability and change, so that the development prospects of these communities

In order to achieve this, the project applies a 'three-pronged' approach: (i) strengthening of the national, provincial and district capacities for planning for rural infrastructure that incorporates climate considerations; (ii) direct financing for infrastructure projects to vulnerable districts through an existing District Development Fund (DDF) mechanism; (iii) implementing ecosystem-based adaptation measures that provide additional climate resilience at the watershed level of project infrastructure intervention.

The project target area is the two provinces of Sekong and Saravane in southern Lao PDR, including all their 12 districts. Those two provinces have been heavily affected by climate change in recent years. Changing rainfall and temperature patterns have caused an increased frequency and intensity of storms leading to flash-floods, flooding and landslides, as well more frequent and persistent dry periods and droughts.

The overall Project Objective is to "improve local administrative systems affecting the provision and maintenance of small scale rural infrastructure through participatory decision making that reflects the genuine needs of communities and natural systems vulnerable to climate risk". The project structure around three outcomes:

- Outcome 1: Capacities provided for local administrative institutions to integrate climate risks into participatory planning and financing of small scale rural water infrastructure provision.
- Outcome 2: Incentives in place for small-scale rural infrastructure to be protected and diversified against climate change induced risks (droughts, floods, erosion and landslides) benefitting at least 50,000 people in 12 districts of Sekong and Saravane provinces.
- Outcome 3: Natural assets (such as wetlands, forests and other ecosystems in sub-catchments) are managed to ensure maintenance of critical ecosystem services, especially water provisioning, flood control and protection under increasing climate change induced stresses, in Sekong and Saravane provinces

The TE will be conducted according to the guidance, rules and procedures established by UNDP and GEF as reflected in the UNDP Evaluation Guidance for GEF Financed Projects.

The objectives of the evaluation are to assess the achievement of project results, and to draw lessons that can both improve the sustainability of benefits from this project, and aid in the overall enhancement of UNDP programming.

EVALUATION APPROACH AND METHOD

An overall approach and method[9] for conducting project terminal evaluations of UNDP supported GEF financed projects has developed over time. The evaluator is expected to frame the evaluation effort using the criteria of **relevance, effectiveness, efficiency, sustainability, and impact,** as defined and explained in the UNDP Guidance for Conducting Terminal Evaluations of UNDP-supported, GEF-financed Projects. A set of questions covering each of these criteria have been drafted and are included with this TOR (*Annex C*) The evaluator is expected to amend, complete and submit this matrix as part of an evaluation inception report, and shall include it as an annex to the final report.

The evaluation must provide evidence-based information that is credible, reliable and useful. The evaluator is expected to follow a participatory and consultative approach ensuring close engagement with government counterparts, in particular the GEF operational focal point, UNDP Country Office, project team, UNDP GEF

[9] For additional information on methods, see the Handbook on Planning, Monitoring and Evaluating for Development Results, Chapter 7, pg. 163

Technical Adviser based in the region and key stakeholders. The evaluator is expected to conduct a field mission to project sites in Saravanh and Sekong Province. Interviews will be held with the following organizations and individuals at a minimum:

- UNDP staff who have project responsibilities
- Implementing Partner – National
- The Chair of Project Board
- The National Project Director (NPD) and Project Manager (PM)
- Component leaders and key experts
- Other project stakeholders, to be discussed at the MTR inception meeting

The evaluator will review all relevant sources of information, such as the project document, project reports – including Annual APR/PIR, project budget revisions, midterm review, progress reports, GEF focal area tracking tools, project files, national strategic and legal documents, and any other materials that the evaluator considers useful for this evidence-based assessment. A list of documents that the project team will provide to the evaluator for review is included in Annex B of this Terms of Reference.

EVALUATION CRITERIA & RATINGS

An assessment of project performance will be carried out, based against expectations set out in the Project Logical Framework/Results Framework (see Annex A), which provides performance and impact indicators for project implementation along with their corresponding means of verification. The evaluation will at a minimum cover the criteria of: **relevance, effectiveness, efficiency, sustainability and impact.** Ratings must be provided on the following performance criteria. The completed table must be included in the evaluation executive summary. The obligatory rating scales are included in Annex D.

Evaluation Ratings:			
1. Monitoring and Evaluation	***rating***	**2. IA& EA Execution**	***rating***
M&E design at entry		Quality of UNDP Implementation	
M&E Plan Implementation		Quality of Execution - Executing Agency	
Overall quality of M&E		Overall quality of Implementation / Execution	
3. Assessment of Outcomes	**rating**	**4. Sustainability**	**rating**
Relevance		Financial resources:	
Effectiveness		Socio-political:	
Efficiency		Institutional framework and governance:	
Overall Project Outcome Rating		Environmental:	
		Overall likelihood of sustainability:	
5. IMPACT	**rating**	**6. OVERALL PROJECT RESULTS**	**rating**
Environmental Status Improvement			
Environmental Stress Reduction			
Progress towards stress/status change			

PROJECT FINANCE / COFINANCE

The Evaluation will assess the key financial aspects of the project, including the extent of co-financing planned and realized. Project cost and funding data will be required, including annual expenditures. Variances between planned and actual expenditures will need to be assessed and explained. Results from recent financial audits, as available, should be taken into consideration. The evaluator(s) will receive assistance from the Country Office (CO) and Project Team to obtain financial data in order to complete the co-financing table below, which will be included in the terminal evaluation report.

Co-financing (type/source)	UNDP own financing (mill. US$)		Government (mill. US$)		Partner Agency (mill. US$)		Total (mill. US$)	
	Planned	Actual	Planned	Actual	Planned	Actual	Actual	Actual
Grants								
Loans/Concessions								
• In-kind support								
• Other								
Totals								

MAINSTREAMING

UNDP supported GEF financed projects are key components in UNDP country programming, as well as regional and global programs. The evaluation will assess the extent to which the project was successfully mainstreamed with other UNDP priorities, including poverty alleviation, improved governance, the prevention and recovery from natural disasters, and gender.

IMPACT

The evaluators will assess the extent to which the project is achieving impacts or progressing towards the achievement of impacts. Key findings that should be brought out in the evaluations include whether the project has demonstrated: a) verifiable improvements in ecological status, b) verifiable reductions in stress on ecological systems, and/or c) demonstrated progress towards these impact achievements.[10]

CONCLUSIONS, RECOMMENDATIONS & LESSONS

The evaluation report must include a chapter providing a set of **conclusions**, **recommendations** and **lessons**.

IMPLEMENTATION ARRANGEMENTS

The principal responsibility for managing this evaluation resides with the UNDP CO in *Lao PDR.* The UNDP CO will contract the evaluators and ensure the timely provision of per diems and travel arrangements within the country for the evaluation team. The Project Team will be responsible for liaising with the Evaluators team to set up stakeholder interviews, arrange field visits, coordinate with the Government etc.

EVALUATION TIMEFRAME

The total duration of the evaluation will be *26* days according to the following plan:

Activity	Timing	Completion Date
Preparation	*3* days	*October 3, 2017*
Inception Report	*1 day*	*October 6, 2017*
Evaluation Mission	*12* days	*October 23, 2017*
Draft Evaluation Report	*8* days	*November 3, 2017*
Final Report	2days	*November 8, 2017*

EVALUATION DELIVERABLES

The evaluation team is expected to deliver the following:

[10] A useful tool for gauging progress to impact is the Review of Outcomes to Impacts (ROtI) method developed by the GEF Evaluation Office: ROTI Handbook 2009

Deliverable	Content	Timing	Responsibilities
Inception Report	Evaluator provides clarifications on timing and method	No later than 2 weeks before the evaluation mission.	Evaluator submits to UNDP CO
Presentation	Initial Findings of the Evaluation	End of evaluation mission	To project management, UNDP CO
Draft Final Report	Full report, (per annexed template) with annexes	Within 3 weeks of the evaluation mission	Sent to CO, reviewed by RTA, PCU, GEF OFPs
Final Report*	Revised report	Within 1 week of receiving UNDP comments on draft	Sent to CO for uploading to UNDP ERC.

*When submitting the final evaluation report, the evaluator is required also to provide an 'audit trail', detailing how all received comments have (and have not) been addressed in the final evaluation report.

TEAM COMPOSITION

The evaluation team will be composed of *(1 international and 1 national evaluators.* The consultants shall have prior experience in evaluating similar projects. Experience with GEF financed projects is an advantage. The International Consultant/*evaluator will serve as the team leader and to be responsible for finalizing the report.* The evaluators selected should not have participated in the project preparation and/or implementation and should not have conflict of interest with project related activities.

The Team members must present the following qualifications:

- Minimum *15* years of relevant professional experience in evaluations of capacity building, climate change adaptation, ecosystem based management and adaptation, or related disciplines
- Knowledge of UNDP and GEF supported projects
- Previous 10 experience with results-based monitoring and evaluation methodologies;
- Technical knowledge in the targeted focal area(s) of climate change adaptation, infrastructure and rural development, ecosystem base adaptation, or related fields
- Experience in South- East Asia would be an asset
- Experience working in multi-culture and diverse environmental settings

EVALUATOR ETHICS

Evaluation consultants will be held to the highest ethical standards and are required to sign a Code of Conduct (Annex E) upon acceptance of the assignment. UNDP evaluations are conducted in accordance with the principles outlined in the UNEG 'Ethical Guidelines for Evaluations'

PAYMENT MODALITIES AND SPECIFICATIONS

(*this payment schedule is indicative, to be filled in by the CO and UNDP GEF Technical Adviser based on their standard procurement procedures)*

%	Milestone
10%	At contract signing
40%	Following submission and approval of the 1st draft terminal evaluation report
50%	Following submission and approval (UNDP-CO and UNDP RTA) of the final terminal evaluation report

APPLICATION PROCESS

Applicants are requested to apply online (http://www.la.undp.org/content/lao_pdr/en/home/operations/jobs.html) by (date11 September 2017). Individual consultants are invited to submit applications together with their CV for these positions. The application should contain a current and complete C.V. in English with indication of the e-mail and phone contact. Shortlisted candidates will be requested to submit a price offer indicating the total cost of the assignment (including daily fee, per diem and travel costs).

UNDP applies a fair and transparent selection process that will take into account the competencies/skills of the applicants as well as their financial proposals. Qualified women and members of social minorities are encouraged to apply.

ANNEX A: PROJECT LOGICAL FRAMEWORK

Taken from project document Pages 69 – 72. See Separate attachment.

ANNEX B: LIST OF DOCUMENTS TO BE REVIEWED BY THE EVALUATORS

Project Document

Quarterly and Annual Project Reports

Technical Reports from Consultant,

Annual Work Plans and Budgets

Project Mid-term Review Report and Management Response

Minutes Project Steering Committee Meetings

Minutes of Annual Review Meetings

Minutes of Monthly Meetings

Annual Audit

Combined Delivery Reports

Training and Workshop Reports

Deliverables and Knowledge Products, including, but not limited to the following:

- *Lao Climate Risk and Vulnerability Assessment Report*
- *District Development Fund Guideline*
- *Etc.*

ANNEX C: EVALUATION QUESTIONS

This list is to be further detailed with more specific questions by the Evaluation Team in collaboration with the UNDP Country Office and UNDP GEF Regional Technical Adviser during the Inception Meeting.

Evaluative Criteria Questions	Indicators	Sources	Methodology
Relevance: How does the project relate to the main objectives of the GEF focal area, and to the environment and development priorities at the local, regional and national levels?			
•	•	•	•
•	•	•	•
•	•	•	•
Effectiveness: To what extent have the expected outcomes and objectives of the project been achieved?			
•	•	•	•
•	•	•	•
•		•	•
Efficiency: Was the project implemented efficiently, in-line with international and national norms and standards?			
•	•	•	•
•	•	•	•
•	•	•	•
Sustainability: To what extent are there financial, institutional, social-economic, and/or environmental risks to sustaining long-term project results?			
•	•	•	•
•	•	•	•
•	•	•	•
Impact: Are there indications that the project has contributed to, or enabled progress toward, reduced environmental stress and/or improved ecological status?			
•	•	•	•

ANNEX D: RATING SCALES

Ratings for Outcomes, Effectiveness, Efficiency, M&E, I&E Execution	***Sustainability ratings:***	***Relevance ratings***
6: Highly Satisfactory (HS): no shortcomings 5: Satisfactory (S): minor shortcomings 4: Moderately Satisfactory (MS) 3. Moderately Unsatisfactory (MU): significant shortcomings 2. Unsatisfactory (U): major problems 1. Highly Unsatisfactory (HU): severe problems	4. Likely (L): negligible risks to sustainability 3. Moderately Likely (ML): moderate risks 2. Moderately Unlikely (MU): significant risks 1. Unlikely (U): severe risks	2. Relevant (R) 1.. Not relevant (NR) ***Impact Ratings:*** 3. Significant (S) 2. Minimal (M) 1. Negligible (N)
Additional ratings where relevant: Not Applicable (N/A) Unable to Assess (U/A		

ANNEX E: EVALUATION CONSULTANT CODE OF CONDUCT AND AGREEMENT FORM

Evaluators:

1. Must present information that is complete and fair in its assessment of strengths and weaknesses so that decisions or actions taken are well founded.
2. Must disclose the full set of evaluation findings along with information on their limitations and have this accessible to all affected by the evaluation with expressed legal rights to receive results.
3. Should protect the anonymity and confidentiality of individual informants. They should provide maximum notice, minimize demands on time, and respect people's right not to engage. Evaluators must respect people's right to provide information in confidence, and must ensure that sensitive information cannot be traced to its source. Evaluators are not expected to evaluate individuals, and must balance an evaluation of management functions with this general principle.
4. Sometimes uncover evidence of wrongdoing while conducting evaluations. Such cases must be reported discreetly to the appropriate investigative body. Evaluators should consult with other relevant oversight entities when there is any doubt about if and how issues should be reported.
5. Should be sensitive to beliefs, manners and customs and act with integrity and honesty in their relations with all stakeholders. In line with the UN Universal Declaration of Human Rights, evaluators must be sensitive to and address issues of discrimination and gender equality. They should avoid offending the dignity and self-respect of those persons with whom they come in contact in the course of the evaluation. Knowing that evaluation might negatively affect the interests of some stakeholders, evaluators should conduct the evaluation and communicate its purpose and results in a way that clearly respects the stakeholders' dignity and self-worth.
6. Are responsible for their performance and their product(s). They are responsible for the clear, accurate and fair written and/or oral presentation of study imitations, findings and recommendations.
7. Should reflect sound accounting procedures and be prudent in using the resources of the evaluation.

Evaluation Consultant Agreement Form[11]

Agreement to abide by the Code of Conduct for Evaluation in the UN System

Name of Consultant: _____

Name of Consultancy Organization (where relevant)**:** _____

I confirm that I have received and understood and will abide by the United Nations Code of Conduct for Evaluation.

Signed at *place* on *date*

[11] www.unevaluation.org/unegcodeofconduct

Signature: _____

ANNEX F: EVALUATION REPORT OUTLINE[12]

i. Opening page:
- Title of UNDP supported GEF financed project
- UNDP and GEF project ID#s.
- Evaluation time frame and date of evaluation report
- Region and countries included in the project
- GEF Operational Program/Strategic Program
- Implementing Partner and other project partners
- Evaluation team members
- Acknowledgements

ii. Executive Summary
- Project Summary Table
- Project Description (brief)
- Evaluation Rating Table
- Summary of conclusions, recommendations and lessons

iii. Acronyms and Abbreviations
(See: UNDP Editorial Manual[13])

1. Introduction
- Purpose of the evaluation
- Scope & Methodology
- Structure of the evaluation report

2. Project description and development context
- Project start and duration
- Problems that the project sought to address
- Immediate and development objectives of the project
- Baseline Indicators established
- Main stakeholders
- Expected Results

3. Findings
(In addition to a descriptive assessment, all criteria marked with (*) must be rated[14])

3.1 Project Design / Formulation
- Analysis of LFA/Results Framework (Project logic /strategy; Indicators)
- Assumptions and Risks
- Lessons from other relevant projects (e.g., same focal area) incorporated into project design
- Planned stakeholder participation
- Replication approach
- UNDP comparative advantage
- Linkages between project and other interventions within the sector
- Management arrangements

3.2 Project Implementation
- Adaptive management (changes to the project design and project outputs during implementation)
- Partnership arrangements (with relevant stakeholders involved in the country/region)
- Feedback from M&E activities used for adaptive management
- Project Finance:
- Monitoring and evaluation: design at entry and implementation (*)

[12]The Report length should not exceed *40* pages in total (not including annexes).
[13] UNDP Style Manual, Office of Communications, Partnerships Bureau, updated November 2008
[14] Using a six-point rating scale: 6: Highly Satisfactory, 5: Satisfactory, 4: Marginally Satisfactory, 3: Marginally Unsatisfactory, 2: Unsatisfactory and 1: Highly Unsatisfactory, see section 3.5, page 37 for ratings explanations.

- UNDP and Implementing Partner implementation / execution (*) coordination, and operational issues

3.3 Project Results

- Overall results (attainment of objectives) (*)
- Relevance (*)
- Effectiveness & Efficiency (*)
- Country ownership
- Mainstreaming
- Sustainability (*)
- Impact

4. Conclusions, Recommendations & Lessons

- Corrective actions for the design, implementation, monitoring and evaluation of the project
- Actions to follow up or reinforce initial benefits from the project
- Proposals for future directions underlining main objectives
- Best and worst practices in addressing issues relating to relevance, performance and success

5. Annexes

- ToR
- Itinerary
- List of persons interviewed
- Summary of field visits
- List of documents reviewed
- Evaluation Question Matrix
- Questionnaire used and summary of results
- Evaluation Consultant Agreement Form

ANNEX G: EVALUATION REPORT CLEARANCE FORM

(to be completed by CO and UNDP GEF Technical Adviser based in the region and included in the final document)

Evaluation Report Reviewed and Cleared by

UNDP Country Office

Name: _____

Signature: _____ Date: _____

UNDP GEF RTA

Name: _____

Signature: _____ Date: _____

Annex 2: Methodological approach

❖ **Evaluation principles**

The consultants will use a participatory and consultative approach. It will ensure constant and effective exchange of information with the project's main stakeholders.

Several basic principles will be used to carry out the evaluation:

- **Effective participation** of all stakeholders (government, agencies, donors, final beneficiaries)
- **Crosschecking** of gathered information
- Emphasis on **consensus and agreement** on the recommendations by the stakeholders.
- **Transparency** of debriefing

❖ **Methodology**

The consultants will elaborate an evaluation matrix of topics/questions per evaluation criteria to be investigated during the field mission and prepare questionnaires as required (see annexe 3).

The evaluation matrix structures the in-country mission:
1. **Which** information to gather?
2. **Where** to get it (from whom? which different sources of information for cross reference),
3. **How** to gather it (which appropriate tools? Interview, report, focus group, individual interviews, government data, etc.)?

Field mission check-list objectives

❖ **Evaluation questions and criteria's**

The consultant will use the 5 DAC evaluation criteria to review the project.

Prospective key areas to review as per evaluation criteria's:

Project design

- Adequacy of project design in relation to identified objectives
- Project design re. other donor funded-interventions
- Design changes over time according to changing conditions

Relevance

- Adequacy of thematic & sectors in relation to issues / national priorities
- Relevance re. final beneficiaries
- Level of consulting / participation of other stakeholders

Effectiveness

- Degree of progress towards achieving project's results
- Level of streamlining with UNDP Country Programme/GEF priorities
- How were risks and assumptions taken into account during implementation
- Communication and visibility including towards donor/external stakeholders

- Lessons learned on implementation modalities/mechanisms

Efficiency

Project's results delivery:

- Effective operational & financial management of the project/RBM
- M&E system and mechanisms to discuss progress
- Quality of communication between stakeholders
- Promotion of joint activities for improved efficiency/partnerships

Adaptive management:

- Log frame changes and analysis of indicators
- Review of procurement plan
- Responsiveness according to changing conditions/ability to adjust to change

Impact

- Visible change re. final beneficiaries/Lao PDR
- Contribution to change as per outcomes
- Partnerships/synergies to enhance the impact
- Added value of project for beneficiaries
- Communicating on project's results

Sustainability

- Level of participation of national stakeholders
- UNDP exit strategy options and appropriation of results by beneficiaries/Lao PDR
- Level of ownership & empowerment of (institutional) beneficiaries to follow-up/ upscale/ replicate

The evaluation matrix is under Annex 5.

❖ **Evaluation delivery**

Evaluation methodology

For a TE, the consultants will use a mix of tools that will enable them to gather data for the project's overview, its potential impact and progress towards the global environmental benefits of the project:

- Semi-structured interviews with Lao PDR/institutional beneficiaries/ external stakeholders (donors, NGOs)
- Focus group for gender-based final beneficiaries (communities)
- Survey of benefits for communities
- Bilateral interviews with project's staff and local project staff
- In-situ review of infrastructures and assessment of new mechanisms put in place

The evaluation matrix structures the field mission:

- **What** information to gather?
- **Where** to get it (from whom? which different sources of information for cross reference),

How to gather it (which appropriate tools? Interview, report, focus group, individual interviews, government data, etc.)?

Evaluation delivery

A classical 4-step approach is to be adopted to carry out the evaluation: 1. *Preparatory phase* (passive data acquisition), 2. *Data collection phase* (active data acquisition), 3. *Data analysis and interpretation* of relevant information & preliminary findings and 4. *Draft and Final Reporting:*

Step 1: Passive data acquisition and inception report (4 Working Days - WD)

Documentary analysis: review of PRODOC documents, results' matrix, UNDAF & UNDP's country Project Document / Plan, relevant Lao PDR policies & strategies on forest conservation/management, M&E reports / GEF TT, minutes of steering committees, periodic narrative and financial project reports, etc.

During this phase, the consultants will (i) identify the key stakeholders, (ii) propose selected project's sites and (iii) draft the questionnaires from the evaluation matrix detailing for each evaluation topic/question (using the 5 evaluation criteria).

Results: basic knowledge about the project, proposed site visits, field checklist and interviews prepared

Deliverable: inception report

Step 2: Active data acquisition (12 WD)

Interviews of all stakeholders[15] through individual/group interviews, institutional beneficiaries, implementation stakeholders, external stakeholders; the interviews (number, target, duration) are to be derived from the checklist.

- Briefing at Vientiane - discussion on inception report/ fine-tuning evaluation questions and list of stakeholders to be met (½ WD)
- 1st round of interviews (1 ½ days)
    - Institutions:
        UNDP, MoNRE (DWR, DPC), MoHA, GEF focal point
    - Project team (national PSU staff)
    - Other national stakeholders (to be determined [ADB, WB, IFAD])
- Field trips to project areas (project implementing partners, institutional/final beneficiaries): discussions with provincial PSU, district authorities, communities on project's achievements, potential benefits, bottlenecks and vision / next steps for sustainability (±7 WD)

Ideally: (i) reviews of physical achievements (infrastructures), interviews of (ii) provincial PSU, (iii) provincial staff (Governor, planning, home affairs, selected Steering Committee members…) (iii) district department heads (planning, irrigation, agriculture, environment…), (iv) district development plan team and committee

[15] List in **Erreur ! Source du renvoi introuvable.**

members, (v) community representatives, (v) district representatives, (vi) other donor-supported/complementary project staff

The team would review the following:

- Assessment of behaviour change of district staff in climate risks planning and ecosystem-based management linked to infrastructures provision
- Review of infrastructures project (preferably 1st phase)
- Assessment of climate resilience mainstreaming into local planning processes
- Effective implementation of development management plans and effects of participatory land use planning
- Review of activities on ecosystem areas

- 2nd round of interviews at Vientiane (1 WD)
  Additional info requests/unfinished 1st round of interviews
- Preliminary findings/debriefing preparation (1 ½ WD)
- Debriefing (½ WD)
  To be held at the end of the mission

Deliverable: PPT presentation and/or mission brief

Step 3: Data analysis and interpretation/preliminary findings and draft report preparation (8WD)

Conversion of data into relevant information to assess the project status and for decision making by relevant stakeholders, Lao PDR institutions; inclusion of the information into the evaluation report – proposal for recommendations; draft report preparation.

Deliverable: draft report

Step 4: Final report preparation (2 WD) (date as per reception of UNDP's comments)

Inclusion of stakeholders' comments / completing the audit trail.

Review of UNDP's comments and integration into the final report.

Deliverable: final report

(Date of comments' reception + 2-3 days)

Annex 3: Interview Guides and Questionnaires

1. Project team

Relevance:

- Did the project address the main issues on climate resilient planning and managing climate risks?
- Were the planned activities in line with the actual sector needs?
- Were there differences from project's start-up until now re. the relevance of activities to be delivered?
- How relevant were/still are the identified assumptions and risks / what was done to mitigate these risks? Was there a risk/mitigation strategy set up at the beginning of the project?

Efficiency:

- What have been the major implementation issues/hurdles of the project? Internal and external contributing factors and measures taken to reduce their impact?
- Timeliness of activities?
- How did eventual discontinuities/shortages in funding or donor agendas affect the overall implementation of the project?
- Were the financial resources for the planned activities in place before they were implemented – i.e. how smooth was the implementation process in relation to financial resources availability -?
- Were the roles and responsibilities of each stakeholder clearly spelt out in terms of planning, implementation, reporting (data collection and information transmission), M&E tools? What could be improved for future interventions?
- What type of support did you receive from UNDP / MoNRE (at central level)? How effective was it?
- Were there mechanisms in place for the coordination of the project's activities with other donors' interventions?
- What project governance system and M&E system is in place? How effective has it been?
- How SMART are the (results/impact) indicators and easy to track?
- Was the contribution of national partners timely and effective for a smooth project implementation / what were the main constraining factors?

Effectiveness:

- What results have (not) been achieved? Why?
- What were the main constraints for the project implementation?
- Review in detail each activity
- What were the main factors for success/failure for each result?
- Was the implementation strategy flexible enough to take into account changing conditions? Was it adapted to ensure maximum effectiveness?
- How effective is the planning process currently (weaknesses and strengths)

Impact:

- Are there intended or unintended, positive or negative (long-term) effects of the project in the districts?

- Did the project contribute to the empowerment/capacity building of institutions / final beneficiaries through one or more results and to which goal/s?
- Did the project result in activities upscaling / innovation by stakeholders for enhanced impact?

Sustainability:

- What results/achievements are most/least sustainable?
- Which results are most likely owned by the (institutional) beneficiaries; how likely will they be sustained / what is required for enhancing sustainability?
- Is there an interest and support to implement similar initiatives in the future / how differently should they be implemented?
- What has been the project's exit strategy?

2. Institutional stakeholders

Relevance:

- What are the responsibilities of your institution in the project
- Were the planned activities in line with the actual sector/institution needs? (give examples)
- Was the project design based on (i) contextual analysis, (ii) participatory needs assessment?
- Did it respond to local demands?

Efficiency:

- Did delays (explain) affect significantly or not the project implementation and achievement of results (give examples)?
- Based on your experience, are there more efficient types of activities that could have achieved the same results?

Effectiveness:

- What was your actual involvement/contribution in the project (as an implementer/beneficiary) / own or project financial resources?
- Were the planned activities effective enough to achieve the outcomes or were there additional unplanned activities needed?
- What support did you benefit from the project?

Impact:

- What + and/or - change has come up with the project's implementation to date in the sector/your institution
- What actual/visible change did the project achieve and that benefit final/institutional stakeholders?

Sustainability:

- Can the changes be maintained on a long-term basis
- Are there mechanisms (not) in place to adjust to change and maintain benefits of results?

3. Partners / collaborating institutions / subcontracted institutions

Relevance:

- What is your role in the project
- What has been your contribution to the project
- Did you contribute to the project design/formulation (including indirectly) / enhancing (in)directly its implementation

Efficiency:

- Did you receive financial/ technical support/resources to conduct your activities
- What limitations/issues did you encounter in the delivery of planned activities?

Effectiveness

- Did the implemented activities contribute to the overall objective of the project
- How complementary were these activities to the project?
- Has there been a need for additional support (from your institution/other institutions) to improve the effectiveness of the activities that you carried out?
- What achievements did this project do?
- What are the main issues of this project?

Impact:

- What change has resulted from the support you provided in relation to the beneficiaries
- Is there more need for support in the future?
- In your view, what change did the project bring to the participatory institutions and final beneficiaries?
- Ownership of project's results

Sustainability:

- What is the likelihood that the beneficiaries will take advantage of the changes/initial support (with) without additional activities (need for follow-up, another type of support to complement/consolidate) - empowerment level?

4. District stakeholders (technical departments)

Relevance:

- What are the limitations of the sector/you activity so as to achieve your objectives (technical, environmental, legal, infrastructures, planning, financial…)?

Effectiveness:

- Support received
- Timeliness of support
- What adaptations were made during implementation?
- What issues/needs were not being addressed by the project?

Impact:

- What change did the project support bring on the population?
  - Directly (direct effect on improved living conditions
  - Indirectly (Increased income, better working conditions, added free time…)
- What change did the project bring in your departments? (give example before/after)

- Positive and/or negative changes? How to limit the negative changes?
- What is the level of ownership of project's results by the final beneficiaries

Sustainability:

- What is the strategy for infrastructures maintenance and ecosystem services delivery
- Can the changes provided by the project be sustained on a long-term basis?
- Is there a need for additional support to sustain these changes
- Are there activities by the final beneficiaries to enhance (some of) the project's results (empowerment)

5. Project's final beneficiaries (district / community representatives / villages)

Relevance:

- What are the advantages/disadvantages of the rural water infrastructures and improved protection of ecosystems
- Are you expecting benefits from these (explain)
- What issues/needs were not being addressed by the project?

Effectiveness/efficiency:

- Support received and timeliness
- Support provided and timeliness
- Were the proposed technical solutions in line with the actual problems you experience (how participative was the process)?
- Quality of support (infrastructures and mechanisms in place to ensure ecosystem services delivery [water, reduced risks…])

Impact:

- What change did the project support bring? (Increased income, better working conditions, added free time…)
- Positive and/or negative changes? How to limit the negative changes?
- What long-term benefit if any would the project's result bring on a long-term basis to the community

Sustainability:

- What is your contribution in ensuring that infrastructures and ecosystem services will be maintained after the project ends
- Are there (in)formal agreements with the district authorities on these aspects
- Is there a need for additional support to sustain these changes

Annex 4: Project Progress Towards Outcomes

The LDCF2 progress implementation is measured through 10 indicators and 10 targets. A color code was used to present the level of progress achieved against each target.

Target achieved

On target to be achieved

Not on target to be achieved

Expected Results	Indicator	Baseline	Targets End of Project	Results / Deliverables	TE Assess.	Justification for rating
Project Objective Local administrative systems affecting the provision and maintenance of small scale rural infrastructure will be improved through participatory decision making that reflects the genuine needs of communities and natural systems vulnerable to climate risk. (equivalent to output in ATLAS)	Percentage change in number of district development plans including specific climate change adaptation actions in the target provinces and districts. Percentage change in the level of active local community participation in climate risk related planning	No CC adaptation actions are in place or budgeted for in district development plans in Sekong or Saravane. Although local communities in GPAR supported districts are aware of climate risks and taking part in planning decisions, there is no structured process in place for analysis and integration of these risks.	50% of district development plans in the project area include at least 3 specific CCA actions by mid project and at least 5 CCA actions by end of project. 60% of District Development Support Committees in the target districts and provinces record specific climate related	**Achieved.**		Since the project started in 2013, both the Paris Agreement and the global Sustainable Development Goals (SDGs) have entered into force globally. Lao PDR was the first ASEAN country to ratify the Paris Agreement (September 2016), and has also mainstreamed the SDGs into planning processes such as the 8th NSEDP for the period 2016-2020 as part of the development priorities for the country. There is an increased understanding that development gains achieved over recent decades may be reversed by the impacts of climate change and overexploitation of natural resources, and thus threaten the intentions of Lao PDR to graduate from Least Developed Country Status by 2020. The general awareness of climate change issues has thus increased significantly since project inception, at least in certain sections of government. There is also an increased appreciation in Lao PDR of the role of nature (e.g. forests and wetlands) for increased climate resilience in the country. Guidelines on "Ecosystem-based Adaptation to Climate Change in Lao PDR" were published in December 2013. The project has

	in target provinces and districts.		concerns emerging from community level annual planning consultations.			used these Guidelines as the "point of entry" for combining infrastructure resilience with ecosystem-based adaptation for rural water infrastructure. The project has contributed to the raised awareness of climate change issues at provincial and district levels in the two target provinces of Saravane and Sekong. At the community level, awareness on climate change issues and nature-based solutions such as forest rehabilitation and management, and wetland conservation, has been increased significantly in beneficiary communities. Finally, the project has contributed to raise the profile of Lao PDR internationally. At the UNFCCC Conference of Parties, held in Bonn, Germany, in November 2017 (the COP23), the project organized a Side Event together with Timor Leste on South-South Cooperation for climate resilient infrastructure planning and implementation, including an emphasis on nature-based solutions to climate change. At the COP23, Lao PDR was also highlighted for its potential for circular economy approaches to sustainable, climate-resilient and low-carbon development.
Outcome 1 Capacities provided for local administrative institutions to integrate climate risks into participatory planning and financing of small scale rural water infrastructure provision. (equivalent to activity in ATLAS)	1.1 Percentage change in the ability of local officials to apply methodologies to analyse climate risks and identify CC vulnerabilities in 12 districts	No officials apply methodologies to analyse climate risks and vulnerabilities. No existing mechanism for climate resilient planning/ monitoring used for district development planning. There are no linkages made between the failure of water infrastructure and the inappropriate management of ecosystems.	50% of sub-national officials and 10% of national officials are able to analyse climate risks for their districts on a macro level (V&A analysis) and are able to identify specific vulnerabilities and adaptation options at village level (CRVA).	**Partially Achieved with actual targets over 50%.** Capacity building has mainly taken the form of on-the-job training linked to implementation of project activities. However, specific training events were implemented during 2016 on climate resilient infrastructure and ecosystem-based adaptation The CRVA process has also included on-the-job		A capacity needs assessment was carried out in 2014, which was then the basis of implementation of capacity – building activities throughout the remaining part of the project. These were mainly carried out as 'on-the-job' events and linked to implementation of specific project activities. For instance, the Climate Risk and Vulnerability Assessment (CRVA) was carried out in 2016 as a key activity of Outcome 1, and of the project. A large element of capacity building was part of the CRVA implementation, with the aim to transfer CRVA skills to local officers and communities. Similarly, the project Infrastructure Specialist worked with district engineers during the project design phase with the aim to increase capacity for climate resilient planning and design. Throughout the life-time of the project, and particularly during the early period (2014-15), a lot of effort was put

		CCA in the water sector currently not budgeted.		training and coaching of both district, provincial and central government staff in applying the CRVA methodology Strengthening Capacity Building on the implementation of small-scale infrastructure through the training workshop on the revised DDF-CR guidelines.		into building capacity with district authorities in the District Development Fund (DDF) mechanism and its associated planning processes. The project Financial Management Specialist along with staff from the MOHA NGPAR programme were instrumental in ensuring that the needed capacity in this area was built and maintained. The project National Infrastructure Specialist worked together with district engineers and other technical staff to build capacity in climate resilient infrastructure design and construction. Again, this was done mainly in an "on-the-job" setting, i.e. during the planning and design of the infrastructure projects funded though the project. A challenge that was identified early during project implementation was to better link infrastructure resilience (Outcome 2) with ecosystem-based adaptation measures (Outcome 3). Better integration of the two Outcomes was facilitated through the planning and implementation of joint capacity building activities between the infrastructure specialist and the ecosystem specialist.
	1.2 Procedures are in place to integrate CC resilient advice and investment for small-scale rural water infrastructure into district planning	No procedures in place	All 12 target districts are applying a climate resilient planning mechanism including project identification, site assessment, approval, execution and M&E.	**Fully Achieved.** All 12 target districts have integrated climate resilient planning and projects into their district development planning. As of September 2017 about 17,000 villagers gained direct benefits from the projects from increased crop production, reduced crop loss due to flooding and drought, climate resilient water supply, and avoided flooding impacts.		
	1.3 Number of district development plans available, reflecting costs for adaptation in the water sector.	No any district development plans available.	All annual district investment plans include evidence of incremental CCA costings for water sector projects by year 4 and at least 4	**Fully Achieved.** The CRVA process has been completed, including all the reporting. The CRVA baselines for 12 potential projects was used as the basis for		

			provide this evidence by Year 2.	prioritizing projects for the funding cycle (2016-17) All 12 district development plans include climate resilient costing		
Outcome 2 Incentives in place for small scale rural infrastructure to be protected and diversified against climate change induced risks (droughts, floods, erosion and landslides) benefitting at least 50,000 people in 12 districts of Sekong and Saravane	2.1 Number of districts routinely investing in climate resilient measures to improve village level water harvesting, storage and distribution systems.	Existing village level water related infrastructure is poorly maintained and not designed to cope with increasing incidence of drought, flood or flash flood events.	By the end of the project all target districts are investing at least 2 projects per year in village level climate resilient water harvesting, storage and distribution systems, which are informed by CRVA. **(Actual target: 12 districts)**	**Fully Achieved for 12 target districts.** The revised DDF Guidelines (including climate resilience measures), has been formally approved by the Project Board in December 2015, endorsed and formally signed by MoNRE.		During the project, the total target of infrastructure projects to be implemented was reduced from 48 projects to 29 projects. This was based on several considerations. Firstly, the original number of 40 projects was unrealistic as it implied four funding cycles (years), and one project in each district per year. However, it was never possible to fund any projects in year one when the project was starting up, and was out of phase with the annual financial cycle of the District Development Fund (DDF) planning mechanism. Secondly, a cautious approach was taken during the first funding cycle in order to ensure quality and build up experiences in the process. Therefore, only four projects were funded during the first round of funding, in 2014. These projects were identified from the Vulnerability Assessment that was undertaken as part of project formulation, and which included a long-list of potential projects for consideration during project implementation. The total grant (2 mill USD) was not changed as part of the reduction of the number of projects. This meant that, with fewer projects than planned, some slightly bigger projects could be supported. In total, 29 infrastructure projects have been funded, including irrigation systems (14 projects), water supply (6 projects), flood gate improvements (2 projects), community bridges (5 projects), and check dams (2 projects). The following infrastructure projects have been implemented:
	2.2 Number of people benefitting from investments in small-scale irrigation systems to increase their resilience against climate change risks.	Climate Change resilience not built-into existing or new small-scale irrigation infrastructure. Infrastructure poorly maintained and options often not appropriate to address the real situation.	At least 50,000 people across 12 districts are benefitting from climate change resilient small-scale irrigation infrastructure,	**Fully Achieved.** Over 37,049 (18,412 females) people across 12 districts gained benefits from 29 infrastructure and 9 EbA projects		

			which has been informed by CRVA. **(Actual target: 38,000 beneficiaries)**			2015: (1) Nong Deng Irrigation Project, Saravane District; (2) Naphrabangyai Water Supply, Lakhonpheng District; (3) Ban Mo Irrigation Project, Lamarm District; (4) Songkhone Irrigation Project, Kaleum District 2016: (5) Hang Heng irrigation Project, Khongsedone District; (6) Sa O dike construction Project, Khongsedone District; (7) Lakhonesy Reservoir Project, Lakhonpheng District; (8) Culvert construction Project, Laongam District; (9) Beung Xai Irrigation Project, Saravan District; (10) Bridge construction Project, Ban Kengnoy, Vapi District; (11) Upgrading Ban Pihai Irrigation Project, Samouay District; (12) Upgrading Ban Patem Irrigation Project, Ta Oy District; (13) Ban Kamkok water Supply Project, Thateng District; (14) Ban Louay water supply Project, Kaleum; (15) Ban Dak Treup water supply Project, Dak Cheung; (16) Ban Naver Irrigation Project, Lamarm District. 2017: (17) Upgrade of Huay Chaluay Irrigation System, Phanoune Village, Saravane District; (18) Upgrade of Chohai Irrigation System, Ta Oi District; (19) Huayhai Bridge construction, Houywa Village, Toum Lan District; (20) Huay Lapong Bridge construction, Donehue Village, Lakhonpheng District; (21) Construction of Reservoir Dike at Beung Sa Ae, Nalaong Village, Vapi District; (22) Hang heng Pumping Irrigation Scheme, Khongsedone District; (23) Upgrade of wooden bridge and associated road, Keb Pheung Village, Laongam District; (24) Lahang Irrigation System, Samouy District; (25) Huay Koung system, Beng Village, Lamarm District; (26) Kongtasing Village water supply, Kaleum District; (27) Tatalang Village water supply, Dakcheung District; (28) Huay Dam Irrigation system, Thateng District. (29) Katao Village water supply project, Toomlarn district, Saravane province.
	2.3 District level fiscal and administrative incentives are introduced that incorporate climate resilient measures for small-scale rural infrastructure.	No fiscal and administrative incentives and structures are in place to promote climate resilient planning at sub-national level. The existing DDF mechanism has the ability to channel baseline development funding only.	At least 25% in additional CCA funds (annual average) expended over and above baseline District Development Funding in at least 12 districts, based on a system that rewards districts that perform well against predetermined criteria.	**Achieved.** Impact monitoring, including a Cost-Benefit Analysis (CBA) of 5 selected infrastructure project sites, was initiated in Q3, 2017: data collection and field work completed, final reporting undertaken in October 2017		
Outcome 3 Natural assets (such as wetlands,	3.1 Number of management	Land use and management procedures	At least 6 management and	**Fully Achieved.** 9 management and action plans covering 9 climate		Two ecosystem areas were identified early on in project implementation (mid 2014) as potential areas for ecosystem interventions, the degraded watershed forest of Phu Ta

forests and other ecosystems in sub-catchments) over at least 60,000 ha are managed to ensure maintenance of critical ecosystem services, especially water provisioning, flood control and protection under increasing climate change induced stresses, in Sekong and Saravane provinces.	/action plans for local scale ecosystems based adaptation to improve the resilience of small-scale rural infrastructure against floods and drought developed and under implementation.	and plans supporting climate change resilience of sub-catchments and small-scale rural infrastructures do not exist or if so are poorly implemented.	action plans covering at least 48 climate resilience small-scale infrastructure investments under implementation across both Sekong and Saravane provinces. **(Actual target: up to 9 management plans)**	resilience small-scale infrastructure investments under implementation in Sekong (5 sites) and Saravane (4 sites) provinces. The total EbA areas covers 14,518.23 ha including 3,754.54 ha of protected forest land.		Yeune, in Thateng District of Sekong Province, and the Sa O Wetland in Khongsedone District of Saravane Province. These two areas were considered pilot ecosystem areas in terms developing a process for ecosystem interventions, which included: (1) community consultations, (2) participatory land use planning, (3) development of ecosystem management plan, including rules and regulations, and - where feasible – (4) identification of specific ecosystem-based adaptation measures. Subsequently, an additional 7 areas were identified based on the CRVA results, and modelled around the two pilot ecosystem areas. The seven additional ecosystem areas include: watershed forest area upstream of Naver village, Lamarm District; (2) watershed forest upstream of Songkone village, Kaleum District; (3) watershed forest upstream of Loy village, Kaleum District; (4) watershed forest upstream of Dark Treub village, Dakcheung District; (5) Beung Ae Wetland, Vapi District; (6) watershed forest upstream of Johai village, Ta Oy District; (7) watershed forest upstream of Pihai village, Samuay District
	3.2 Number of key project stakeholders aware of links between improved ecosystem management and sustainability of investments in small scale rural water infrastructure.	Local planners and decision makers do not make the linkages between infrastructure investment and local land management practices. There is little or no information available to planners providing a reference point or practical experience in this area.	At least 250 national, provincial and district planners have received knowledge and learning approaches and materials produced by the project on ecosystem based management linkages to infrastructure provision.	**Fully Achieved.** 303 government staff at sub-national level received training and gained better understanding on basic knowledge on climate change adaptation, CRVA and EbA management approach.		

Annex 5: Mission Itinerary and Sites Visited

Date	Time	Activity	Responsible persons	Location
MO 23/10	13:30-15:00	Briefing UNDP Env. Unit	Margaret, Chitlatda, Vincent Singha.	UNDP CO
	14:45-15:30	Briefing meeting with UNDP Senior Management	RR, DRR, Margaret, Vincent. Singha, Chitlatda	UNDP CO
TU 24/10	08:00-09:30	Meeting with UNCDF	Thillaphong, Vincent, Singha	UNDP CO
	09:45-11:30	Meeting with Project Support Unit	Vincent, Singha, Anders, Souksavanh, Bounpanh, Khemmala, other relevant participants (MOHA Coordinator, & Admin Officer)	MONRE/PSU Office
	11:30-12:10	Meeting with SM/Project Board members of MONRE	Vincent, Singha, Sangkhan Thiengthammavong, Souksavanh Sisouvong	MONRE
	14:40-16:00	Meeting withSM/Project Board member of MOHA	Vincent, Singha, Nisit Keopanya and Nat. coordinator	MOHA
WE 25/10	07 :30-8:45	Travel to Pakse by plane then to Sekong by car	Vincent, Singha	VTE-Pakse-Sekong
	13:00-15:00	Meeting with Lamarm District Development Support Committee and District Development Support Team	Vincent, Singha, District Vice Governor, relevant District Offices who are members, Focal point for implementation of components 1 and 3, Focal point for implementation of components 2.	Lamarm district/Sekong province
	15:00-16:30	Visit to Hang Heng irrigation Project site	Vincent, Singha, village authorities, farmers and relevant project stakeholders	Lamarm district/Sekong province
TH 26/10	08:30-10:30	Meeting with Sekong Provincial Support Committee and Provincial Project Support Unit	Vincent, Singha, Provincial Cabinet Chief, relevant Provincial Offices who are members, focal point for components 1 and 3, focal point for component 2, and relevant participants.	Sekong province
	10:40-12:00	Meeting with Thateng District Development Support Committee and District Development Support Team	Vincent, Singha, village authorities, farmers and relevant project stakeholders	Thateng district/Sekong province
	13:00-15:00	Meeting with project stakeholders and visit to Kam Kok village Water Supply and EbA Project.	Vincent, Singha, village authorities, farmers and relevant project stakeholders	Thateng district/Sekong province
	15:00-16:00	Travel to Saravane province	Vincent, Singha	Thateng/Sekong-Saravane
FRI 27/10	08:00-10:00	Meeting with Saravane Provincial Support Committee and Provincial Project Support Unit	Vincent, Singha, Provincial Cabinet Chief, relevant Provincial Offices who are members, focal point for components 1 and 3, focal point for component 2, and relevant participants.	Saravane province
	10:15-12:00	Meeting with Saravane District Development Support Committee and District Development Support Team	Vincent, Singha, Project team members lead by District Planning and Investment Office and Focal point for implementation of component 2.	Saravane district/Saravane province
	13:00-15:00	Visit to Buengxai Small-Scale Flood Protection Infrastructure and Land Use Planning	Vincent, Singha, village authorities, farmers and relevant project stakeholders	Saravan district/Saravane province
	15:00-16:00	Travel to Sekong	Vincent, Singha	Salavane-Lao Gnam

SAT 28/10	08:00-16:00	Travel to Dak Cheung district to meet with district & village authorities, farmers and relevant project stakeholders following by site visit to Daktreub water project site and Naver irrigation project	Vincent, Singha, District Development Support members, village authorities, farmers and relevant project stakeholders, Project team members lead by District Planning and Investment Office and Focal point for implementation related components.	Saravane district/Saravane province
	16:00-17:00	Travel to Lamarm district	Vincent, Singha	Dak Chueng-Lamarm
SU 29/10	08:00-14:00	Visit to Irrigation project at Nam Mo village	Vincent, Singha, village authorities, beneficiaries and relevant project stakeholders	Mo village/Lamarm district/Sekong
	14:00-16:00	Travel to Vapy district	Vincent, Singha	Lamarm-Vapy
MO 30/10	08:30-10:00	Meeting with Vapy District Committee and local project stakeholders	Vincent, Singha, Project team members lead by District Planning and Investment Office (Vice District Governor, Head of DOHA, Head of DONRE, Head of Finance Department) and Focal point for implementation of component 2.	Lamarm-Vapy
	10:00-12:00	Meeting with local project stakeholders and visit project sites Bung Ae Dike Construction project.	Vincent, Singha, village authorities, beneficiaries and relevant project stakeholders.	Vapy district
	13:00-15:00	Visit project site at Bung Ae Dike Construction project.	Vincent, Singha, village authorities, beneficiaries and relevant project stakeholders.	Vapy district
	15:00-17:30	Travel to Pakse	Vincent, Singha,	Vapy-PKZ
TU 31/10	08:40-09:40	Teleconference with the LDCF2 Project Infrastructure Specialist	Mr. Soulisak, Vincent, Singha	Pakse, Vientiane
	10:00-11:00	Teleconference with LDCF2 Project EbA Specialist	Mr. Bounpanh Senthvi, Vincent, Singha	Pakse, Vientiane
	12:40-13:55	Travel PKZ-VTE	Vincent, Singha	PKZ-VTE
	15:30-1630	Meeting with UN Habitat	Mr. Liam Fee, Vincent, Singha	UNDP
WE 01/11	08:20-09:20	Meeting with IFAD Country Programme Officer	Soulivanh Pattivong, Vincent, Singha	IFAD
	10:00-11:00	Meeting with M&E Specialist	Ms. Amphaivanh Chanmany	MONRE
	11:00-12:00	Meeting with Environmental Protection Fund	Khampadith Khammounheuang, vincent, Singha	MORE
	13:20-15:30	Interview LDCF2 Project Manager	Mr. Vanxay Boutanavong, Vincent, Singha	MONRE
	15:45-16:30	Meeting with GPAR Project	Gerry O'Driscol, vincent, singha.	MONRE
	16:45-17:30	Debriefing meeting with RR/UNDP	Kaarina, Margaret,Cchitlatda, vincent, singha.	UNDP
THU 02/11	13:30 - 15:30	Debriefing with stakeholders	Vincent, Singha, Margaret, chitlatda, Vanxay, others	UNDP
FR 03/11	10:00-12:00	Meeting UNDP	Vincent, Margaret	UNDP
THU 16/11	13:30-14:30	Meeting Regional GEF Focal Point	Vincent, Keti Chachibaia	(skype)

Annex 6: List of Persons Consulted

Sekong Provincial Support Committee, 26 October 2017.

1. Mr. Bounlerd Hanxay, Sekong Provincial Office of Natural Resources and Environment, as Component 1 and 3 Focal Person.
2. Mr. Saysamone Phithaksin, Deputy Head, Sekong provincial Office of Home Affairs.
3. Mr. Bounlay Boudthi, Head, Sekong Provincial Office of Natural Resources and Environment.
4. Mr. Chanhhao Xaiyathong, Sekong Provincial Department of Natural Resources and Environment, LDCF2 Provincial Focal Person, Sekong Province.
5. Mrs. Sengchanh Phanthalangsy, Project Finance and Administration Officer, LDCF2 Sekong Project Office.

Lamam District Development Committee/Sekong Province, 25 October 2017

1. Mr. Vongphachanh Phaengsy, Deputy Head of Lamam District Division of Finance, Sekong Province.
2. Mr. Souphab phioukhampha, Lamam Governor District Cabinet Office, Sekong Province.
3. Mr. Bounnong khamphoumy, Head of Lamam Division of Planning and investment.
4. Mr. Bounone Phommanasa, Deputy Head of Lamam District Division of Natural Resources and Environment Office, Sekong Province.
5. Mr. Nouchay Phetvongsa, Deputy Head, Lamam District Agriculture and Forestry Office, Sekong Province.

Thateng District Development Support Committee/Sekong Province, 26 October 2017.

1. Mr. kham-yiad Keopaserd, Deputy Head, Thateng District Division of Finance
2. Mr. Khamphaui Tanavong, Deputy Head, Thateng District Office of Natural Resources and Environment.
3. Mr. Souksamay, Head of Thateng District Office of Home Affairs.
4. Mr. Sengsouvanh Saysavanh, Head of Thateng District Office of Planning and Investment.
5. Mr. Hatsadone Dimanivong, Technical Staff, Thateng District Office of Planning and Investment.
6. Mr. Kham, Technical Staff, Thateng District Office of Finance, Sekong Province.

Kam Kok/Aling Village cluster-Water Supply and EbA Project, Thateng District/ Sekong Province, 25 October 2017.

1. Mr. Bountheng Chingkariang, Chief of Village, Aling Village, Thateng District, Sekong Province.
2. Mr. Bouakham Khingkatang, Deputy Chief of Village, Aling Village, Thateng District, Sekong Province.
3. Mr. Inkham Chingkariang, Water User Group Member, Village, Aling Village, Thateng District, Sekong Province.
4. Mrs. Anode, Farmer, Aling Village, Thateng District, Sekong Province.

Naver Village, Irrigation Project, EbA Project, Lamam District/Sekong Province, 30 October 2017.

1. Mr. Phouvong Keophosy, Head of Lao Front Association, Naver Village, lamam District, Sekong Province.
2. Mr. Khamloun Yortdala, Chief, Naver Village, Lamam District, Sekong Province.
3. Mr. Bounsen Keotonesy, villager, Naver Village, Lamam District, Sekong Province.
4. Mrs. Tian, villager, Naver Village, Lamam District, Sekong Province.

Mo Village irrigation Upgrading Project, Lamam District/Sekong province, 30 October 2017.

1. Mr. Vanthong Sekhamphik, Deputy Chief, Water User Group, Mo Village, Lamam District, Sekong Province.

Dak Treub Village Water Supply & EbA Project, Dakcheung District/Sekong Province, 28 October 2017.

1. Mr. Siphone Vordala, Chief of Village, Dak Treub Village, Dak Chueng District, Sekong Province.
2. Mr. Khamvi Saychanse, Deputy Chief of Village, Dak Treub Village, Dak Chueng District, Sekong Province.
3. Mr. Sengboun, Villager, Dak Treub Village, Dak Chueng District, Sekong Province.
4. Mrs. Maly, Farmer, Dak Treub Village, Dak Chueng District, Sekong Province.
5. Mrs. Nott, Farmer, Dak Treub Village, Dak Chueng District, Sekong Province.
6. Mrs. Keo, Farmer, Dak Treub Village, Dak Chueng District, Sekong Province.

Saravane Provincial Support Committee, 27 October 2017.

1. Mr. Thongsay, Deputy Head, Provincial Office of Natural Resources and Environment, Saravane Province.
2. Mr. Bounthavone Thammaphat, Department of Finance, Saravane Province.
3. Mr. Souliya Sisomboun, Provincial Department of Finance, Saravane Province.
4. Mr. Somphong Chansamueng, Provincial Office of natural Resources and Environment, Saravane Province.
5. Mr. Sangviane Thidalak, LDCF Project Focal Person, Provincial Office of Na
6. Mrs. Vongdeuane, Finance and Administration Officer, Saravane Office.
7. **Saravane District Development Support Committee, Saravane Province, 27 October 2017.**
8. Ms. Nouansay Keomek, Saravane District Governor, Saravane Province.
9. Ms. Khao Chanthabouly, Saravane District Planning and Investment Office, Saravane District Governor, Saravane Province.
10. Mr, Chaleun Sisouvong, Saravane District Office of Natural Resources and Environment, Saravane Province.
11. Mr. Soulisack Douangmala, Saravane District Office of Finance, Saravane Province.
12. Mr. Chansamay Phengbouasavanh, District Office of Home Affairs, Saravane Province.

Buengxay irrigation Project, Saravane District/Saravane Province, 27 October 2017.

1. Mr. Bounhieng Keophila, Chief of Buengxay Village,
2. Mr. Souphanh Douangmixay, Deputy Head of Buengxay Village, Vapi District, Saravane Province.
3. Ms. Banechay Sengsay, Deputy Chief, Buengxay Village, Vapi District, Saravane Province.
4. Mr. Phouvong Yomthasombath, Deputy Chief, Buengxay Village, Vapi District, Saravane Province.
5. Mr. Sengdao Keokhamphanh, Deputy Head, Buengxay Village LPR Party, Vapi District, Saravane Province.
6. Ms. Tem Kongmaly, Head, Lao Women Union, Buengxay Village, Vapi District, Saravane Province.
7. Mr. Bouala Boualavanh, Farmer, Buengxay Village,

Bueng Ae, Irrigation & EbA Project, Na La-ong Village, Vapi District/Sekong Province, 30 October 2017.

1. Mr. Chanh Song Sounekeovorachack, Deputy Chief of Village, Na la-Ong Village, Vapi District, Saravane Province
2. Mr. Somvvang Sounndalay, Deputy Chief of Village, Na la-Ong Village, Vapi District, Saravane Province.
3. Mr. Siphay Vaenchaleun, Head of Water User Group, Na la-Ong Village, Vapi District, Saravane Province.

Vapi District Development Support Committee, Saravane Province, 31 October 2017.

1. Mr. Phouvong Thongsa-orn, Vice Governor, Vapi District, Saravane Province.

2. Mr. Daoving Vipakon, Chief, Cabinet Office, Vapi District Office of Natural Resources and Environment, Saravane Province.
3. Mr. Khamfong Chanthachone, Head, Vapi Office of Home Affairs, Saravane province.
4. Mr. Thinnakone Seng-outhai, Head, Vapi District Office of Finance, Saravane province.
5. Mr. Kongkham Khotpanya, Head, Division of Planning, Vapi District Office of Planning and Investment, Saravane province.
6. Mr. Kik Kitvongxay, Deputy Head, Vapi DONRE.

Ministry of Natural Resources and Environment (MoNRE), 24 October 2017.

1. Mr. Sangkhane Thiengthammavong, Director General, Department of Climate Change management, MoNRE.
2. Mr. Vanxay Boutanavong, Head, Division of Climate Change Management, MoNRE, LDCF2 Project Manager,

Ministry of Home Affairs (MoHA), 25 October 2017.

1. Mr. Nisith Keopanya, Director General, Department of Planning, MoHA.
2. Mr. Laty Keolangsy, Technical Staff, MoHA.

Project Support Unit/ MoNRE 24 October 2017.

3. Mr. Anders Poulsen, Chief Technical Adviser.
4. Mr. Souksavanh Sisouvong, Assistant Project Manager.
5. Ms. Amphayvanh Chanmany, Project Monitoring and Evaluation Specialist.
6. Mr. Bounpanh Senethavi, Ecosystem Specialist.
7. Mr. Soulisack, Infrastructure Specialist.
8. Ms. Khemmala Haraixay, Finance Officer.

Project Support Unit /MoHA

Ms. Phoonsavanh Souphavanh, Public Financial and Management Specialist, MoHA.

Environmental Protection Funds

1. Mr. Khampadith Khammounheuang, Executive Director, Environmental Protection Fund.

Global Environmental Funds (GEF)

1. Mr. Lonekham Atsanavong, Director General, Environmental Quality Control Department, MoNRE, National GEF Operations Focal Point.
2. Ms. Keti Chachibaia, UNDP Climate Change Advisor, Regional GEF Focal Point, Bangkok, Thailand.

GPAR Project

1. Mr. Gerry O'Driscoll, UNDP CTA for the GPAR Project.

IFAD Lao PDR

1. Mr. Soulivanh Pativong, Country Program Officer, IFAD Lao PDR.

IUCN Lao PDR

1. Ms. Phoutsakhone Ounchith, Head of Office, IUCN Lao PDR, Bourichanh Rd, Ban Naxay, Xaysettha District, Vientiane Capital, Lao PDR.

UNDP Lao PDR

1. Ms. Kaarina Immonen, UNDP Resident Representative.
2. Dr. Margaret Jones Williams, Environment Unit Manager, UNDP.
3. Ms. Chitlatda Keomuongchanh, Program Analyst-Environment, UNDP.

UNCDF Lao PDR

1. Mr. Thilaphong, Program Officer.
2. Ms. Hyun Jee, Technical Specialist.

UN HABITAT Lao PDR

1. Mr. Liam Fee, Consultant for the project "Enhancing the climate and disaster resilience of the most vulnerable rural and emerging urban human settlements in Lao PDR"

Annex 7: List of Documents Consulted

1. Project Document dated 8 May 2013
2. Project Mid-term Review Report dated September 2016, JJ Bellamy and Thongdeuane N.
3. LPAC Minutes of Meeting dated March 2013
4. Project Mid-term Review Report and Management Response*
5. Project Sustainability Strategy dated June 2016.
6. Audit Report 2014
7. Audit Report 2015
8. Audit Report 2016
9. 2017 Annual Progress Report/PIR
10. 2014 Annual Report
11. 2015 Annual Report
12. 2016 Annual Report
13. 2013 Annual Work Plans and Budgets
14. 2014 Annual Work Plans and Budgets
15. 2015 Annual Work Plans and Budgets
16. 2016 Annual Work Plans and Budgets
17. 2017 Annual Work Plans and Budgets
18. Minutes of Project Board Meeting dated March 2015
19. Minutes of Project Board Meeting dated December 2016
20. Minutes of Monthly Meetings dated: February 28, 2017; May 3, 2017; June 28, 2017; January 26, 2016; March 7, 2016 (combined February, March and Q1/2016); April 5, 2016; May 19, 2016; July 29, 2016 (combined may, June and Q2/2016); September 2, 2016 October 10, 2016; December 13, 2016 (combined with Project Annual Review); February 20, 2015; March 24, 2015; April 24, 2015 (combined with Q1/2015); May 28, 2015; June 26, 2015; July 22, 2015 (combined with Q2/2015); August 31, 2015; September 24, 2015 (combined with Q3/2015); October 2, 2015; November 13, 2015; December 11, 22015; January 4, 2014; February 10, 2014; March 7, 2014 (combined with Q1/2014); April 7, 2014; May 19, 2014; June 16, 2014; July 15, 2014; August 15, 2014; September 12, 2014 (combined with Q2/2014); October 28, 2014; November 27, 2014 (combined with Q3/2015); June 2013 (combined with Q meeting); September 25, 2013 (combined with Q meeting); October 8, 2013; November 4, 2013; December 26, 2013 (combined with Q4/2013).
21. Combined Delivery Reports (CDRs):
    - CDR 2013;
    - CDR 2014;
    - CDR 2015;
    - CDR 2016.
22. Lao Climate Risk and Vulnerability Assessment Report (Final Summary Report) May 2016, Icem.
23. District Development Fund Guideline* on Financial Management
24. District Development Fund Guideline* on Allocation and Use
25. District Development Fund Guideline* on Implementation
26. District Development Fund Guideline* on Planning
27. UNDP-UNCDF Manual for Assessment of District Performance under SDSC Program, July 2014
28. Note to File on DDF Guidelines dated December 10, 2015.
29. Draft report of impact study and Cost benefit Analysis on communities impacted by infrastructure and EbA projects "Effective Governance for Small-Scale Rural Infrastructure and Disaster Preparedness in a Changing Climate (LDCF II), MoNRE, Vientiane, June 2017.
30. Country Program Document for the Lao PDR (2012-2015), UNDP, January 2011.

31. Country Program Document for the Lao PDR (2017-2021), UNDP, January 2011.
32. Public Expenditure Management (PEM) Process Review of the District Development Fund – Climate Resilient Grants (DDF-CRG) in Lao PDR: Business Process Mappings, Lessons Learnt, and Optimization Options-Final Report, Cristina M. and Latsany P. October 2017.
33. UNDAF Action Plan 2012-2015 Lao PDR, UNDP, July 2012.
34. Reports on Participatory Land Use Planning and Ecosystem-Based Adaptation Baseline Survey in 9 target villages in Thateng and Kongsedone Districts in Sekong and Salavanh Provinces, dated 13 Jul-29 September 2015.
35. Reports on Participatory Land Use Planning and Ecosystem-Based Adaptation Baseline Survey in 7 sites from 9 target villages in Larmam, Kalum and Darkchung districts, Sekong province and Vapi, TaOy and Samouay districts, SLV province, LDCF2 Project, Sekong, dated June 2017.
36. The 8th Five-Year National Socio-economic Development Plan (2016–2020), Ministry of Planning and Investment, June 2016.

Annex 8: Evaluation questions matrix

Evaluative Criteria Questions	Indicators	Sources	Methodology
Relevance: How does the project relate to the main objectives of the GEF focal area, and to the environment and development priorities at the local, regional and national levels?			
• Is the project relevant and coherent with Lao DPR needs, policies, and strategies?	• References in Lao PDR policies, strategies	• Documents	• Documentary review
• Is the project reflects the needs of the beneficiary community?	• Level of satisfaction / participation of beneficiaries	• Beneficiaries	• Interviews
• Is the project coherent with UNDP programming strategy for Lao DPR?	• References of key thematic in relevant documents ; perception of implementation by UN staff	• UNDAF / UNDP country programme	• UNDP staff interview, documentary review
• To what extent is the project suited to local and national development priorities and policies?	• Level of satisfaction / participation of institutions	• Institution work plans, staff	• Interviews (district/provinces) & review of operational plans
• To what extent is the project is in line with GEF operational programs?	• Coherence with GEF focal areas	• GEF web site & GEF focal point	• UNDP staff interview, documentary review
Effectiveness: To what extent have the expected outcomes and objectives of the project been achieved?			
• To what extent the project did enhance capacities for local administrations to integrate climate risks into planning and financing of rural water infrastructures	• New mechanisms in place at district level for consultation, implementation & M&E of infrastructures • Review/degree of utilisation of guidelines • Induced actions due to project's results ; review of indicators	• Lao PDR institutions at national, provincial and district level • Final beneficiaries	• Specific project documents (guidelines) • Interviews
• To what extent did the incentives protect rural infrastructures against climate related risks?	• Number of beneficiaries from rural water infrastructures • Number of schemes planned/in place/disused	• Project sites • Project staff • Final beneficiaries • District authorities	• In situ verification; interviews

	• Level of mainstreaming of incentives into local planning processes • Review of indicators		
• What is the level of management of natural assets as a strategy to reduce risks?	• Communities' participation into management of assets (level of involvement) • District authorities/community leadership • Adoption of new practices	• Annual report, • Local project team • District technical staff • Community leaders and final beneficiaries	• Documentary review, interviews
• What factors have led to the project (or parts of the project) outcomes/results' being successful, and what national lessons can be learned?	• Analysis of lessons learned / best & worst practices	• Specific technical documents; UNDP & project staff	• Documentary review, interviews
• What factors were crucial for the achievement or failure of the project objectives (managerial, institutional, technical…)	• Analysis of hypothesis, risks	• PIR • Steering Committee minutes • UNDP, provincial/district & project staff	• Documentary review, interviews
Efficiency: Was the project implemented efficiently, in-line with international and national norms and standards?			
• The extent to which the results have been achieved with the least costly resources possible, compared with alternative approaches to attain the same results.	• Review of project costs	• Project staff • District/provincial technical staff • PIR & annual reports	• Interviews & documentary review
• To what extent the project was delivered on time and budget, and reasons/lessons for discrepancies - has the project been implemented efficiently, and cost-effectively?	• Analysis of implementation / activity delivery delays	• Project staff • District/provincial technical staff • PIR & annual reports	• Interviews & documentary review
• Degree of operationalization of the project's M&E system and effective leverage to induce changes of implementation / adaptation to changing implementation conditions	• Periodicity of meetings & follow-up of meetings • Feedback system review • Effectiveness of steering committees	• Project staff & UNDP staff; steering committee minutes; PIR & annual reports • Provincial staff	• Interviews & documentary review

• What is the project's exit strategy?	• Degree of ownership of results and anticipated level of (in)dependence after project completion	• Project staff & UNDP staff, beneficiaries & district administration; PIR & annual reports	• Interviews & documentary review
Impact: Are there indications that the project has contributed to, or enabled progress toward, reduced environmental stress and/or improved ecological status?			
• To what extent were the originally intended, overriding objectives in terms of development policy (goals) realistic?	• Degree of achievement of primary objectives (indicators)	• Annual reports & PIR, project & UNDP staff	• Documents review, interviews
• What is the level of results' ownership by the final / institutional beneficiaries?	• Level of project results achievements and appropriation by relevant stakeholders	• Annual reports & PIR, beneficiaries, project & UNDP staff	• Documents review, interviews
• Did the project empower the beneficiaries to enhance the impact of project's results / outcomes?	• Level of independence of beneficiaries to pursue project related activities	• Annual report & UNDP, project staff, beneficiaries	• Documents review, interviews
• What real changes (economic, social, institutional, environment, gender…) have the activities made to the beneficiaries as a result of the project interventions? How many people have been affected?	• Change analysis of beneficiary situation	• Final beneficiaries, Administration staff	• Interviews
• (Non-) project-induced replication effect	• Number of replications (copy-paste effects)	• Project staff and local Administration	• Interviews
Sustainability: To what extent are there financial, institutional, social-economic, and/or environmental risks to sustaining long-term project results?			
• How likely is the ability of the project to continue to deliver benefits for an extended period of time after completion in the project areas?	• Review of activities that will strengthen sustainability	• Annual reports, project staff	• Documentary review and interviews
• Did the project empower the final / institutional beneficiaries to increase the likelihood of sustainability of the project's results?	• Likelihood or evidence of off-project actions that will increase the sustainability of project results • Additional external support • Evidence of beneficiary taking over of project's results	• External stakeholders, Ministries & Provincial/District Administrations • Communities	• Interviews
• To what extent is the project sustainable at technical, institutional, social and cultural, levels? Are results financially / economically sustainable?	• Review of risks & mitigation measures • Level of satisfaction of beneficiaries	• PRODOC & annual reports • District technical staff	• Documentary analysis • Interviews

	• Mechanisms to ensure maintenance of infrastructures	• Final beneficiaries/communities	
• To what extent did the capacity building activities contribute to sustaining the project's objectives?	• Level of institutional ownership	• Ministries • Provincial and District Administration; UNDP & project staff	• Interviews

Annex 9: Brief Expertise of Consultants

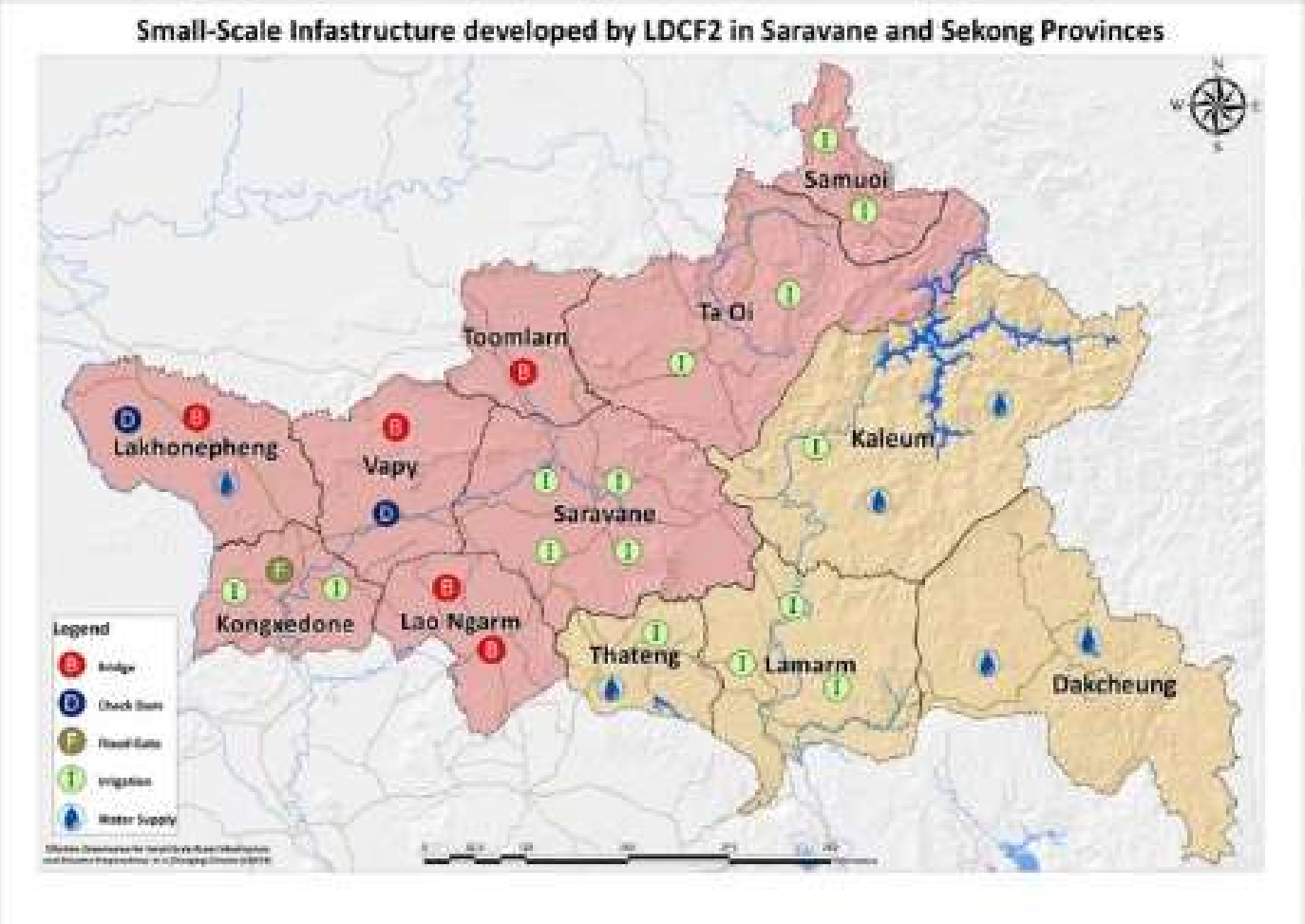
Mr Singha Ounniyom:
(ounniyom.singha@gmail.com)

- Project management & coordination/project formulation, planning & implementation, M&E - knowledge of logical framework, NIM SOP, SWOT and Multi-criteria analyses.
- MSc. in Mechanization of Hydromeliorative Works, M Eng. in Water and Environmental Resources Management, and BA in business administration.
- Program & project evaluation/audit/spot check, institutional appraisal: analysis of relevance /effectiveness/ efficiency/social, institutional impact/ political, social & cultural, technological, institutional & financial sustainability/cross cutting issues; questionnaires design & interviews of beneficiaries.
- Knowledge of Lao PDR Government development policies, strategies, laws, regulations and procedures.
- Data acquisition methods for evaluations: questionnaires drafting & interviews of beneficiaries.
- Knowledge of monitoring & evaluation methodologies.
- Water quality monitoring, river basin planning, groundwater survey, climate change adaptation and climate change mitigation.
- Contract management.

Mr Vincent Lefebvre:
(lefebvrevinc@gmail.com)

- Program management & coordination / project formulation & implementation, M&E - knowledge of PCM, logical framework & ZOPP methodologies / equipment specifications.
- MA in tropical agriculture and post-graduation in business administration
- Program & project evaluation / technical audit / institutional appraisal: analysis of relevance / effectiveness / efficiency / social, institutional & economic impact / political, social & cultural, technological, institutional & financial sustainability / cross cutting issues (gender, AIDS, environment & institutional capacity building); questionnaires design & interviews of beneficiaries.
- Data acquisition methods for evaluations: questionnaires drafting & interviews of beneficiaries; SWOT analysis; (semi-) structured interviews, focus groups.
- Knowledge of monitoring & evaluation methodologies (incl. Management Effectiveness Tracking Tool).
- Food security / Agronomy / agro-forestry / agro-industry / agro-climate and climate mitigation - adaptation / horticulture.
- Cartography / remote sensing / mapping / GIS (Arcinfo, Mapinfo, Ilwis) / Database management systems (MECOSIG, COONGO).
- Land & water resources evaluation / crop potential analysis / participatory rural appraisals / natural resources management / mountain agro-ecosystems.
- Soil survey / soil conservation / soil fertility.
- Statistics including programming in SAS & Delphi.
- Renewable energies (wind, bio-diesel, rape seed oil).

Annex 10: Location of Project Sites



Annex 11: Evaluation Consultant Code of Conduct and Agreement Form

Evaluators:

1. Must present information that is complete and fair in its assessment of strengths and weaknesses so that decisions or actions taken are well founded.
2. Must disclose the full set of evaluation findings along with information on their limitations and have this accessible to all affected by the evaluation with expressed legal rights to receive results.
3. Should protect the anonymity and confidentiality of individual informants. They should provide maximum notice, minimize demands on time, and respect people's right not to engage. Evaluators must respect people's right to provide information in confidence, and must ensure that sensitive information cannot be traced to its source. Evaluators are not expected to evaluate individuals, and must balance an evaluation of management functions with this general principle.
4. Sometimes uncover evidence of wrongdoing while conducting evaluations. Such cases must be reported discreetly to the appropriate investigative body. Evaluators should consult with other relevant oversight entities when there is any doubt about if and how issues should be reported.
5. Should be sensitive to beliefs, manners and customs and act with integrity and honesty in their relations with all stakeholders. In line with the UN Universal Declaration of Human Rights, evaluators must be sensitive to and address issues of discrimination and gender equality. They should avoid offending the dignity and self-respect of those persons with whom they come in contact in the course of the evaluation. Knowing that evaluation might negatively affect the interests of some stakeholders, evaluators should conduct the evaluation and communicate its purpose and results in a way that clearly respects the stakeholders' dignity and self-worth.
6. Are responsible for their performance and their product(s). They are responsible for the clear, accurate and fair written and/or oral presentation of study imitations, findings and recommendations.
7. Should reflect sound accounting procedures and be prudent in using the resources of the evaluation.

Evaluation Consultant Agreement Form[16]

Agreement to abide by the Code of Conduct for Evaluation in the UN System

Name of Consultant: __Vincent LEFEBVRE_____

Name of Consultancy Organization (where relevant)**:** _____

I confirm that I have received and understood and will abide by the United Nations Code of Conduct for Evaluation.

Signed at Brussels on 12/1/2018

Signature: _____

[16] www.unevaluation.org/unegcodeofconduct

Evaluation Consultant Agreement Form

Agreement to abide by the Code of Conduct for Evaluation in the UN System

Name of Consultant: _Singha OUNNIYOM_____

Name of Consultancy Organization (where relevant)**:** _____

I confirm that I have received and understood and will abide by the United Nations Code of Conduct for Evaluation.

Signed at Vientiane on 12/1/2018

Signature: 

Annex 12: Evaluation Report Clearance Form

(to be completed by CO and UNDP GEF Technical Adviser based in the region and included in the final document)

Evaluation Report Reviewed and Cleared by

UNDP Country Office

Name: Kagring Immonen, Resident Representative

Signature: _____ Date: _____

UNDP GEF RTA

Name: Keti Chachibaia

Signature: _____ Date: _____