



PROJECT IDENTIFICATION FORM (PIF)

PROJECT TYPE: FULL-SIZED PROJECT

TYPE OF TRUST FUND: LDCF

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PART I: PROJECT INFORMATION

Project Title:	Climate Adaptation in Wetlands Areas (CAWA) in Lao PDR		
Country:	Lao Peoples Democratic Republic	GEF Project ID:	5489
GEF Agency:	FAO	GEF Agency Project ID:	622577
Other Executing Partner(s):	Ministry of Natural Resources and Environment (MONRE) International Union for Nature Conservation (IUCN)	Submission Date:	September 9, 2013
GEF Focal Area (s):	Climate Change	Project Duration (Months)	60 months
Name of parent program	NA	Agency Fee (\$):	448,171

A. INDICATIVE FOCAL AREA STRATEGY FRAMEWORK:

Focal Area Objectives	Trust Fund	Indicative Grant Amount (\$)	Indicative Co-financing (\$)
CCA-1 Reduced vulnerability to the adverse impacts of climate change, including variability, at local, national, regional and local level (project Outcomes 2 and 3)	LDCF	4,350,656	15,205,000
CCA-2 Increase adaptive capacity to respond to the impacts of climate change, including variability, at local national, regional and local level (project Outcome 1)	LDCF	366,923	1,700,000
Total Project Cost		4,717,579	16,905,000

B. INDICATIVE PROJECT FRAMEWORK

Project Objective: To reduce climate change (CC) vulnerability of communities and the fragile wetland eco-systems upon which they depend.						
Project Component	Grant Type	Expected Outcomes	Expected Outputs	Trust Fund	Indicative Grant Amount (\$)	Indicative Co-financing (\$)
Component 1: Development of appropriate methodology and capacities for climate change (CC) vulnerability assessment in wetlands agro-ecosystems	TA	1. Improved understanding of CC impacts and risks, enhancing capacities of communities, local and central administrations to design, prioritise and implement CC adaptation and disaster management measures in 2 wetlands areas of national importance ¹ .	1.1. Methodological tool for participatory CC vulnerability and disaster risk assessment in wetlands developed ² . 1.2. At least 200 community, 60 district and 20 provincial level stakeholders ³ trained in conducting participatory CC vulnerability and disaster risk assessments in wetlands. 1.3. Participatory CC	LDCF	350,000	1,547,000

¹ Project target areas are the Xe Champhone (XC) wetlands in Savannakhet Province and Beung Kiat Ngong (BKN) wetlands in Champassak Province. The core zones of these 2 wetlands have been nominated as the first Ramsar sites in Lao PDR.

² The participatory CC vulnerability and disaster risk assessment tool (output 1.3) will be complemented by a participatory CC adaptation and disaster management planning and M&E tool (output 3.2).

³ Focus on existing structures (e.g. Members of water user groups, fisheries management committees, Ramsar Committees, Disaster Management Committees, River Basin Committees, etc.).

			vulnerability risk assessment, including initial planning for adaptation and disaster management, of the Beung Kiat Ngong (BKN) and Xe Champhone ⁴ (XC) wetlands covering the vulnerability of the wetlands eco-systems in relation to the vulnerability of farming and natural resources livelihoods of 60 communities.			
Component 2: Integrated CC adaptation for wetlands and associated farming and livelihoods systems	INV	2. Efficient and cost-effective measures in place to reduce the impact of CC and natural disasters on wetlands eco-systems and/or local livelihoods.	<p>2.1. Adaptive Agricultural practices, systems and infrastructure (climate smart agriculture, improved cropland management, dry and wet season rice cultivation, livestock production, aquaculture) in 60 villages (70,000 people) in XC and BKN are improved or developed without affecting the eco-system they depend on, to ensure resilience to CC and natural disasters.</p> <p>2.2. Diversified, non-agricultural livelihoods of the most vulnerable people in 3 target districts⁵ (10,000 people with focus on women) are improved (e.g. fisheries, NTFP collection) or diversified (e.g. eco-tourism, handicraft, cottage industry) by promoting sustainable resource extraction and value addition, using vocational training and credit.</p> <p>2.3. Early warning, disaster risk reduction and early recovery measures and systems in place to respond to increased frequency of natural disasters in XC and BKN and linked to existing Disaster and River Basin Management plans and structures.</p> <p>2.4. At least 10,000 hectares of wetlands forest in XC and BKN under improved CC adaptation-oriented management to address climate induced risks of increased erosion along rivers and channels, accelerated</p>	LDCF	3,550,000	10,060,050

⁴ Update of existing 2012 MRC CC Vulnerability Assessment, Xe Champhone Case study.

⁵ Champhone and Xannabuly districts for Xe Champhone and Pathoumphone district for Beung Kiat Ngong.

			sedimentation of permanent water bodies and flood damage to settlements, irrigation structures and other important community assets.			
Component 3: Development of suitable tools and capacities for long term planning of CC adaptation in wetlands agro-ecosystems	TA	3. Efficient and cost-effective CC adaptation and disaster management measures in wetlands integrated in local and national planning processes.	3.1. Tool for participatory CC adaptation and disaster management planning and M&E in wetlands developed. 3.2. At least 200 community, 60 district and 20 provincial stakeholders ⁶ trained in participatory CC adaptation and disaster management planning and M&E. 3.3. CC adaptation and disaster management are integrated in the management plans ⁷ for XC and BKN and corresponding district, provincial and sub-catchment/river basin development plans or disaster management plans. 3.4. Costed national CC adaptation and disaster management programme for wetlands developed and integrated into existing national water resources, agriculture, disaster management and climate change action plans.	LDCF	450,000	3,676,500
Component 4. Knowledge management, dissemination of best practices, monitoring and evaluation	TA	4.1. Project monitoring system developed and implemented 4.2 Project best practices and lessons learned disseminated	4.1.1. Results based M&E system developed. 4.1.2. Midterm and final evaluation implemented 4.2.1. Best practices and lessons learned collected and disseminated	LDCF	150,000	100,000
Sub-Total					4,500,000	15,383,550
Project management Cost (PMC)					217,579	1,521,450
Total project costs					4,717,579	16,905,000

⁶ Focus on existing structures (e.g. Members of water user groups, fisheries management committees, Ramsar Committees, Disaster Management Committees, River Basin Committees, etc.).

⁷ The management plans for the XC and BKN Ramsar sites and the management plan for the Xe Piang Protected Area which includes the BKN wetlands or Ramsar site.

C. INDICATIVE CO-FINANCING FOR THE PROJECT BY SOURCE AND BY NAME IF AVAILABLE

Sources of Cofinancing	Name of Cofinancier	Type of Cofinancing	Amount (\$)
National Government	Ministry of Natural Resources and Environment (MONRE)	In-kind	500,000
National Government	Ministry of Agriculture and Forestry (MAF)	In-kind	500,000
Local Government	Savannakhet Province, Champhone district	Grant	2,300,000
GEF Agency	Food and Agriculture Organisation (FAO)	Grant	1,000,000
Other Multilateral Agency	World Bank (WB)	Grant	3,755,000
Other Multilateral Agency	Asian Development Bank (ADB)	Grant	3,400,000
Bilateral Aid Agency	Kreditanstalt für Wiederaufbau (KfW)	Grant	3,150,000
Other Multilateral Agency	Mekong River Commission (MRC)	Grant	750,000
Other Multilateral Agency	International Union for the Conservation of Nature (IUCN)	Grant	800,000
CSO/Private Sector	Wildlife Conservation Society (WCS) and Minerals and Metals Group (MMG)	Grant	750,000
Total Cofinancing			16,905,000

D. INDICATIVE TRUST FUND RESOURCES (\$) REQUESTED BY AGENCY, FOCAL AREA AND COUNTRY

GEF Agency	Type of Trust Fund	Focal Area	Country Name/Global	Grant Amount (\$) (a)	Agency Fee (\$) (b)	Total (\$) c=a+b
FAO	LDCF	Climate Change	Lao PDR	4,717,579	448,171	5,165,750
Total Grant Resources				4,717,656	448,171	5,165,750

E. PROJECT PREPARATION GRANT (PPG)

	<u>Amount Requested (\$)</u>	<u>Agency Fee for PPG (\$)</u>
• No PPG required.	-- 0--	--0--
• (upto) \$50k for projects up to & including \$1 million	_____	_____
• (upto)\$100k for projects up to & including \$3 million	_____	_____
• (upto)\$150k for projects up to & including \$6 million	<u>150,000</u>	<u>14,250</u>
• (upto)\$200k for projects up to & including \$10 million	_____	_____
• (upto)\$300k for projects above \$10 million	_____	_____

PPG AMOUNT REQUESTED BY AGENCY(IES), FOCAL AREA(S) AND COUNTRY(IES) FOR MFA AND/OR MTF ROJECTS ONLY

Trust Fund	GEF Agency	Focal Area	Country Name/Global	(in \$)		
				PPG (a)	Agency Fee (b)	Total c = a + b
LDCF	FAO	Climate Change	Lao PDR	150,000	14,250	164,250
Total PPG Amount				150,000	14,250	164,250

MFA: Multi-focal area projects; MTF: Multi-Trust Fund projects.

PART II: PROJECT JUSTIFICATION

A. PROJECT OVERVIEW

A.1. Project description

A.1.1 The global problem, root causes and barriers that need to be addressed

The problem. Rural communities and the Xe Champone (XC) and Beung Kiat Ngong (BKN) wetlands in which they live are vulnerable to climate change (CC) impacts. Both the farming communities and the wetlands have a fairly high level of exposure and sensitivity to CC impacts⁸. Climate change vulnerability is increased by the communities' and the wetlands' low adaptive capacity⁹. The interdependent nature of these communities' livelihoods and their surrounding wetlands pose both challenges and opportunities with respect to adapting to CC and its impacts going forward.

The available CC science indicates that annual rainfall in the Mekong region is expected to increase by 13.5% by 2030, primarily during the rainy season. The National Adaptation Plan of Action (NAPA, 2009) observes that floods and droughts are likely to become the primary CC related hazards in Lao PDR. The NAPA also indicates that dry seasons are likely to increase in length while wet season rainfall will occur in even shorter and more intense intervals. This will amplify the already considerable variability in wet and dry season flows in the Mekong River and its tributaries. Wetlands, which are naturally sensitive to floods and droughts, will be increasingly affected as hydrological regimes of river basins change. A recent climate vulnerability assessment of the XC Wetlands (MRC, 2012) revealed that higher rainy season discharge and peak flows are likely to increase flooding and erosion along the river banks and channels. More soil will wash into the XC River accelerating siltation of deep river pools when backwater from the Mekong River slows down the flow. Increased exposure to higher and stronger peak flows will push more sediment further into marshes and ponds and will therefore accelerate closure and fragmentation of these permanent water bodies. Equally as daunting for Lao stakeholders is the uncertainty that will prevail as to the dynamic reaction of natural wetland systems to climate driven impacts. The study highlights that more frequent and extreme flooding may expand wet season fish habitat but that accelerated closure and fragmentation of permanent water bodies, exacerbated by longer and more severe droughts, is expected to result in an overall reduction in fish numbers and other aquatic wildlife essential to local livelihoods. Other environmental functions or services provided by wetlands, including flood control, ground water recharge and water storage and release, will also be increasingly undermined by climate induced degradation or loss of permanent water bodies and will in turn undermine the adaptive capacity of riparian and downstream communities. The adaptive capacity of the eco-system itself is low and it is hard to control sedimentation from the upstream catchment but in the wetlands there is the potential to stabilize banks through re-vegetation and to enhance protective forest cover surrounding permanent water bodies.

Rice cultivation, especially paddy or rain fed rice, is by far the most important livelihood of rural communities in both XC and BKN. Paddy fields located around wetlands are naturally more exposed to floods. Farmers in XC interviewed during the MRC vulnerability assessment and by FAO during the preparation of this PIF, have indicated that more frequent and extreme flooding events combined with an increasingly unpredictable beginning and end of the rainy season, have already started affecting wet season rice production. Currently around 20% of wet season rice production in Champhone District is lost due to drought, flooding and pests every year and this trend is expected to worsen with increased CC impact. Increased impact on wet season rice cultivation has resulted in an expansion of more intensive dry season or irrigated rice cultivation. Livestock production is usually the second most important livelihood in the XC area. According to farmers, a decrease in food and water availability has affected the production of larger animals such as buffaloes and cows and has prompted a shift towards smaller livestock. The lack of clean water and sufficient food has in turn increased the incidence of animal disease. The decline of capture fisheries has led to the development of aquaculture. All these trends and

⁸ defined by IPCC respectively as “the nature and degree to which a system is exposed to significant climatic variations” and “the degree to which a system is affected, either adversely or beneficially, by climate-related stimuli”

⁹ defined by IPCC as “the ability of a system to adjust to climate change (including climate variability and extremes), to moderate the potential damage from it, to take advantage of its opportunities, or to cope with its consequences”

changes are confirmed by local agricultural statistics. The high exposure of original livelihood activities to climate impact has contributed to their decline and the development of adaptation alternatives which are often more intensive and less affordable to the poor. Weak government structures and low capacities have also affected the development of adaptation mechanisms which could decrease climate induced impacts on original farming practices such as rain fed rice cultivation. The same weaknesses have prevented the creation of alternative jobs or improved value chains which could reduce dependence on more vulnerable activities such as agriculture and resource extraction.

Barriers to CCA in wetlands: The following barriers prevent stakeholders at the local and national levels from taking the necessary additional steps to adapt to climate change in an integrated and sustainable manner.

Barrier 1: Inadequate knowledge and understanding of CC impact and the complex and interrelated vulnerabilities leads to partial, short-term and sometimes expensive and unsustainable adaptive practices being developed and applied at local levels.

While there is awareness within government and at community level of the critical role wetlands play in food security, income generation and the productivity of associated agricultural systems, other less tangible environmental services such as flood control, water storage, etc. provided by wetlands are not properly valued. General CC awareness is also limited and policy guidance remains general. The increasingly important contribution of wetlands to climate resilience is therefore often overlooked. There is a very limited capacity to collect, analyse and interpret new and complex climate data and the understanding of the direct impact of CC in general and on wetlands in particular, remains very limited. Knowledge about climate vulnerability of floodplain agriculture and how it relates to the vulnerability of the associated wetlands eco-systems is equally scarce.

This limited understanding and knowledge has in some cases led to partial, short-term and sometimes unsustainable adaptation or mal-adaptation. In XC, communities have started adapting by shifting from rainy season rice production to fishing and natural resources extraction in the wet season and to irrigated rice cultivation around permanent water bodies in the dry season. Expansion of irrigated agriculture has in turn exacerbated vulnerability to droughts and increased soil salinity problems. Irrigated rice cultivation has affected fisheries by converting important fish habitat and by reducing water levels in permanent water bodies. The expansion of irrigation infrastructure has also affected natural water flows and fish migrations and has reduced the available dry season pasture for livestock. These local efforts to adapt, which may prove effective in the short-term, add to the initial climate impact on wetlands and undermine long term-climate resilience of these agro eco-systems. Building on local knowledge, stakeholders will have to acquire the necessary technical expertise to collect and interpret new and more complex data.

Barrier 2: Little to no experience in actually designing and implementing integrated CC adaptation measures for livelihoods and interdependent natural eco-systems based upon in depth vulnerability assessments.

Appropriate and integrated adaptation and disaster management measures in wetlands and associated floodplain agriculture are not known and tested and appropriate livelihoods improvement activities and livelihoods alternatives remain to be defined. Building on a more thorough understanding of CC impact and in depth vulnerability assessments, stakeholders will need technical and financial support to design and implement more integrated or ecosystems based adaptation measures and to develop effective disaster management systems or activities which are becoming increasingly indispensable.

Top down decision making, planning and implementation approaches do undermine the value of local knowledge and traditional coping mechanisms. To ensure effectiveness and early adoption, support will need to build on or complement these traditional knowledge and management practices and local

investments. The promotion of local consultation and participatory approaches will ensure local knowledge and experiences are integrated into adaptation and disaster management.

Sector specific and compartmented mandates of line ministries and their provincial and district offices do not favour the development of integrated approaches to adaptation and disaster management. The use of existing multi-sector and multi-stakeholder management structures such as the Provincial Ramsar Committees and District Implementation Teams, Disaster Management Committees (Provincial, District and Village), Protected Area¹⁰ Committees and River Basin (and sub-basin) Committees, will guarantee a more integrated approach or implementation.

Barrier 3: Long term CC adaptation (CCA) planning is sector specific, general, not yet translated or integrated into local planning and is not informed by tested and cost-effective CCA measures in the Laotian context.

Existing national CCA planning is sector specific, broad and remains rather theoretical as there is little tangible experience to build on so far. There is also little guidance on how to translate national plans into local level or site specific CCA plans. Long term CCA planning at the local level can only be effective when local stakeholders understand the complex and long term implications of CC and have been directly involved in designing and improving CCA measures or disaster management systems and activities. Even with this exposure there is a need to build capacities of local planners, stakeholders and community leaders for designing long term CCA and disaster management plans and for monitoring their implementation.

A.1.2 Baseline scenario, adaptation alternative and incremental cost reasoning

The project will finance the additional costs of removing the existing barriers to maintaining services and functions delivered by vulnerable wetlands eco-systems in the face of a changing climate and to improving initial coping mechanisms and traditional management practices leading to a more integrated and eco-systems based adaptation strategy for the XC and BKN wetlands.

Component 1: Development of appropriate methodology and capacities for CC vulnerability assessment in wetlands agro-ecosystems

Baseline: Currently, in Lao PDR, the available information on climate and vulnerability to CC (e.g. through National Communications or the NAPA) lacks specificity. The level of knowledge and understanding of the main elements of CC vulnerability with respect to the agriculture and water resources sector, is very general at the national and even more so at the local level. This in turn hampers stakeholders' abilities to design targeted, cost-effective CCA strategies and solutions. The LDCF investment will benefit from an initial baseline case study of the Xe Champhone and Siphandone wetlands' climate vulnerabilities, conducted under MRC's Climate Change Adaptation Initiative (CCAI). This study, even though focused on the vulnerability of the wetlands eco-systems and less on the climate impact on local associated livelihoods, provides initial site and eco-system specific information and a partial and preliminary vulnerability assessment methodology for wetlands. Fact sheets¹¹ on the XC and BKN wetlands, developed as part of the submission to the Ramsar Convention, and subsequent baseline reports produced by IUCN's Mekong Water Dialogues Programme do not describe CC impacts or vulnerabilities but do provide valuable baseline information on population, livelihoods and biodiversity for the XC and BKN wetlands sites. Baseline data were also collected in Champhone District by MRC's CCAI to inform the development of a CCA pilot in the agricultural sector. This initial vulnerability assessment covers only 3 of the 45 villages located in and around the XC wetlands. The assessment also remains sector specific and does not address the more complex wetlands scenario. FAO, as part of the

¹⁰ The BKN wetlands or Ramsar Site is located in the Xe Piang Protected Area.

¹¹ http://www.wetlands.org/reports/ris/2LA002_RIS_FINAL.pdf and http://www.wetlands.org/reports/ris/2LA001_RIS.pdf

2011 Agricultural Census, collected nation-wide data on food security and vulnerability but this information has yet to be used to inform more targeted climate change vulnerability assessments.

Adaptation alternative: Under Component 1 the LDCF investment will enable stakeholders to conduct comprehensive and participatory climate vulnerability assessments (Output 1.3) in the 2 targeted wetlands sites. These detailed assessments will cover climate impact on both the eco-system and the services it provides and agriculture practiced in and around the wetlands sites. The participatory vulnerability assessment tool (Output 1.1) or guidelines to be developed and used by the project, will build on baseline surveys and initial vulnerability assessments and baselines studies conducted by the MRC, IUCN, and FAO. It will draw on FAO's extensive experience in incorporating climate change considerations into agricultural investment programmes¹², including the rapid assessments of impacts of climate variability and climate change and building ecosystem approaches for climate-smart agriculture. Initial training (Output 1.2) on climate change and climate vulnerability concepts and on the use of the tool will be conducted prior to the assessments. Initial training will build up the necessary technical capacity of different stakeholder but will also raise general awareness about the importance of wetlands, their contribution to climate resilience and the general project objectives. An initial compilation of available data, including the information generated by baseline projects, hydro-meteorological data collected by MONRE's Meteorology and Hydrology Department and local agricultural and disaster related statistics, will be starting point for these detailed vulnerability assessments. The active involvement of local or community stakeholders in the vulnerability assessment will facilitate the integration of local knowledge and will ensure that proposed adaptation and risk reduction measures build on traditional coping mechanisms and resource management practices. Representation of different groups (e.g. women, poorest, ethnic groups) in training and assessment activities will ensure the identification of group specific CC risks, vulnerabilities and adaptation needs. Initial vulnerability assessments will help design appropriate adaptation and disaster management measures and will include initial adaptation plans for the 2 sites and all concerned villages.

Component 2: Integrated CC adaptation for wetlands and associated farming and livelihoods systems

Baseline: The MONRE together with IUCN, the Provincial Ramsar Committees and Ramsar District Implementation Teams, has developed a management plan for the BKN Ramsar site and will soon initiate the development of a plan for XC. The development of these site specific management plans is or will be based on initial socio-economic and biodiversity baseline surveys and experiences gained from past or on-going biodiversity conservation, participatory fisheries management and livelihoods development projects in and around these sites. IUCN planned support for XC is the revision and demarcation of the boundaries of the Ramsar site, rehabilitation of critical forest habitats and the development of an eco-tourism strategy. In BKN, IUCN is currently supporting livelihoods development activities including crop diversification and the promotion of organic fertilisers. The Wildlife Conservation Society (WCS), financially supported by the Minerals and Metal Group (MMG) is supporting the conservation of the critically endangered Siamese Crocodile. Current and future WCS activities include the strengthening of community based protection measures, habitat management and livelihoods support such as eco-tourism development and small scale support to agriculture. MONRE is currently seeking additional KFW support to implement elements of the BKN management plan and to contribute to the development and implementation of the future XC management plan. Possible KFW support would focus on tangible or hardware investments in wetlands management and protection (e.g. demarcation, alternative livelihood development, removal of invasive species, development of irrigation or flood protection infrastructure, etc.). WB support to the Sustainable Floodplain Management Component of the National Integrated Water Resources Management (IWRM) Programme will focus on two key river basins in the south of Lao PDR including the Xe Bang Hiang river basin which covers the XC wetlands. Some of the important elements of this component include the rehabilitation of critical infrastructure (flood gates, village based

¹² http://typo3.fao.org/fileadmin/templates/tci/pdf/climate_change_considerations.pdf

irrigation and the construction of fish hatcheries). Other measures will aim at the enhancement of the ecological value of wetlands of basin wide significance. The Ministry of Agriculture and Forestry (MAF), through its provincial and district offices, is focussing its investment budget on the development of rice production, especially irrigated or dry season rice cultivation. These investments are concentrated in high potential areas including wetlands. Champhone District, including over half the XC wetlands, will receive 2.3 million USD (2013-2015) to secure and improve rice production. CC vulnerability and adaptation needs have not been considered in the above mentioned investments, with the exception of the BNK management plan which refers to climate change risks and the need to conduct a CC vulnerability assessment for the site. MRC's CCAI has piloted on-farm adaptation activities in the agricultural sector in 3 villages of Champhone District. The initial phase focused on the impact of droughts on rice cultivation and a second phase will address the impacts of floods. By the time the project starts implementing adaptation and disaster management measures, CCAI pilots will have benefited from a number of years of consolidation and will be drawing to an end. This will offer the project a rare opportunity to build on these achievements, giving it the necessary longer term perspective when developing a more integrated and eco-systems based approach to adaptation in the XC but also BKN wetlands. The new project will also up-scale interventions to all concerned villages as part of developing a comprehensive, site specific and eco-systems based approach to adaptation.

Adaptation alternative: Climate adaptation and disaster management are not yet fully considered and integrated in the current wetlands management and agricultural development activities for both sites. Component 2 will build on the current baseline and the initial comprehensive vulnerability assessments conducted under Component 1 to 1) to adapt farming practices and infrastructure without causing negative impacts on the wetlands eco-system, 2) to improve livelihoods to further consolidate climate resilience, 3) to help prepare for and respond to immediate and increasingly recurrent climate induced natural disasters and 4) to mitigate climate impacts on the eco-system itself and maximise the contribution of wetlands to the resilience of local farmer communities. Output 2.1 will focus on adaptation in the agricultural sector and will build on existing coping mechanisms and adaptation options. Where appropriate, LDCF resources will be used to improve, rehabilitate and climate proof existing irrigation infrastructure, maximising water use efficiency and minimising impact on the surrounding eco-system. The project will help assess the impact and efficiency of new irrigation schemes or rehabilitation work funded by the government or donors (including the WB-IWRM programme and KFW) by introducing concepts of climate risk and adaptation and will provide corresponding advice on appropriate designs. Project support will also cover the improvement of paddy or rainy season rice cultivation to address more recurrent floods and short drought spells and to prevent further conversion of wetlands habitat for dry season rice farming. Output 2.1 will include the strengthening of water user groups, the promotion of more equitable and efficient water sharing mechanisms, agricultural diversification and the introduction or promotion of appropriate drought or flood resistant rice varieties (e.g. floating rice). Output 2.2 will contribute to the improvement and diversification of existing wetlands dependent livelihoods and the development of new sources of income. The consolidation and diversification of livelihoods activities, specifically targeting women and the poorest, will contribute to the adaptive capacity of the most vulnerable among farmer communities. The project will support value chain development and improved marketing of local products, eco-tourism development and vocational training. Where appropriate, credit will be provided through existing user groups and associations. Output 2.3 will build upon the existing activities and mandate of local Disaster Management Committees by establishing or consolidating early warning systems and networks and by developing or strengthening corresponding disaster management and early recovery plans and procedures. Special attention will be given to the increasingly critical effects of floods on settlements, community assets, wet season rice cultivation, irrigation infrastructure and livestock. Output 2.4 will specifically focus on the improvement and management of flooded forest or climax vegetation along river banks and channels to reduce erosion and to protect settlements and infrastructure (e.g. irrigation dams, gates and canals) from flood damage. Improved forest cover around permanent water bodies such as marches oxbows and ponds, will prevent accelerated siltation and therefore closure or fragmentation of these critical fish and wildlife habitats. The project will help establish and formalise linkages between local Disaster Management Committees and the River Basin

Management Committees and will ensure the optimal use of information provided by hydro-meteorological networks supported and developed by the IWRM programme. Output 2.4 will include the further development and strengthening of fisheries co-management to ensure the sustainability of this important livelihood essential to the resilience of local farmer communities. Project activities and experiences under this outcome will also inform and complement investments made as part of the Sustainable Floodplain Management Component of the IWRM programme by introducing CC considerations in River Basin Management and by improving or reviewing important investments and designs.

Component 3: Development of suitable tools and capacities for long term planning of CC adaptation in wetlands agro-ecosystems

Baseline: A management plan for BKN exists and the one for XC is being developed. There is an increasing recognition of the need to address the impact of CC and increasing incidence of natural disasters through these site specific plans, corresponding provincial and district development plans or management plans covering wider landscapes (e.g. protected areas, river basins). The lack of practical experience in CCA and disaster management has prevented the effective mainstreaming of CCA and disaster management in local planning processes. Furthermore local development plans are generally compilations of sectorial plans, lacking the necessary integrated response to climate impact. The development of climate related policy documents such as the NAPA (2009) and the National Climate Change Strategy (2010) has contributed significantly to general awareness and capacity building. These climate specific national policies and plans remain general and provide limited guidance in terms of implementation of tangible and targeted adaptation programmes. The ADB supported “Capacity Enhancement for Coping with Climate Change” project is currently developing specific action plans or programmes to guide the implementation of the National Climate Change Strategy. This includes the development of adaptation programmes in key sectors such as agriculture and water resources. Within the water resources sector, wetlands have already been identified as important and specific areas of intervention due to their significance in terms of resource and resilience building. FAO is currently assisting the MAF in developing a Plan for Disaster Risk Reduction in Agriculture. These different policies and plans provide an increasing amount of detail and guidance but remain sectorial and often difficult to translate into concrete measures and plans at local level or in more complex eco-systems such as wetlands.

Adaptation alternative: Under Component 3 the project will build on this increasingly detailed guidance as well as lessons learned from Component 2 and other sector specific adaptation projects, to integrate multi-sector adaptation and disaster management into local planning: the XC and BKN management plans, corresponding district and provincial development or disaster management plans, the Xe Piang Protected Area management plan¹³ and the wider River Basin Management Plans. The development of a tool (Output 3.1) for participatory CC adaptation and disaster risk management planning and M&E in wetlands will be based on experiences gained from Components 1 and 2. Training (Output 3.2) in the use of this participatory planning tool will be provided to local stakeholders directly involved in planning activities included under Output 3.3. Training will, where possible, be coordinated with capacity development activities conducted by IUCN, MRC, the WB-IWRM programme and other baseline projects. Principles of adaptive planning will be included in the tool and corresponding training to ensure local stakeholders are able to regularly review, adapt and improve plans based on implementation results and changing conditions. Linkages between the project and the IWRM programme will contribute to more climate responsive River Basin Planning and particularly in the Xe Bang Hieng¹⁴ and Sekong River Basins where the XC and BKN wetlands sites are located. Under Output 3.4 the project will develop a costed national CCA and disaster management programme for wetlands that will inform and facilitate the implementation of existing national water resources, agriculture, disaster management action plans and

¹³ The Beung Kiat Ngong Wetlands or Ramsar Site is located inside the Xe Piang Protected Area.

¹⁴ The Xe Bang Hieng and Sekong Basins or 2 of the 5 priority river basins identified in the National Water Resources Strategy and Action Plan and where the establishment of River Basin Committees will be piloted.

policies and national CCA plans or programmes for the water resources and agriculture sectors. Past and future national wetlands inventories¹⁵ will help identify and prioritise sites to be included in the national CCA and disaster management programme for wetlands.

Component 4: Knowledge management, dissemination of best practices, monitoring and evaluation.

The objective of this component is to effectively monitor and evaluate project progress indicators, monitor risk mitigation measures and design new measures to face unexpected risks, and to extract lessons learned (including successes and failures) that might be useful for future initiatives. Financing under this component will address: i) the design and operation of the project's M&E system based on results-based management; ii) mid-term and final project evaluations, including defining response strategies to recommendations provided by these evaluations and, if necessary, adjustment of project implementation; and iii) the systematization of best practices and lessons learned.

A.1.3: Adaptation benefits, innovativeness, sustainability and potential for scaling up

Adaptation benefits: The project will support the restoration and/or protection of an estimated 10,000ha of flooded forest in 2 wetlands of national significance. This will help reduce the impact of climate change induced erosion of river banks and channels, siltation of permanent water bodies and the potential damage to infrastructure caused by more frequent and more intense flooding. Protection of critical fish habitats and support to fisheries co-management will help secure an important livelihood which constitutes an essential component of the resilience of local farmer communities. Project investments in more appropriate climate resilient agricultural practices and infrastructure, will benefit an estimated 70,000 people by securing and improving production subject to increasingly frequent and prolonged floods and droughts. Activities to improve existing wetlands dependent livelihoods and to develop alternative sources of income will benefit an estimated 10,000 people and will contribute to the increased resilience of farming communities. Improved disaster management will help reduce flood, drought and pest induced crop damage, loss of livestock and damage to irrigation infrastructure.

Innovativeness: The project is innovative in that it will promote an integrated and eco-systems based approach to adaptation, designed to enable local communities and local stakeholders to strengthen the resilience of their livelihoods to climate change as well as the resilience of the natural wetland systems upon which their livelihoods depend. The project will strategically focus its investment in 'adaptation hotspots' or well-defined, densely populated, vulnerable and disaster prone eco-systems which also significantly contribute to climate resilience of riparian and downstream communities through the various eco-systems services they provide.

Sustainability and potential for scaling up: The use of existing multi-sector structures such as Provincial Ramsar Committees, District Ramsar Implementation Teams, Provincial/District Disaster Management Committees, Protected Area Committees or River Basin Committees and the mainstreaming of climate adaptation and disaster management in corresponding planning processes, will increase sustainability of project results. The participatory approach used for 1) vulnerability assessments, 2) the integration of local knowledge and initial coping mechanisms in the prioritisation and design of adaptation and risk reduction measures and 3) the development of long term adaptation plans, will ensure local ownership and therefore contribute to the sustainability of project activities. The systematic knowledge transfer, the

¹⁵ The most recent inventory of wetlands of the Lao PDR (Claridge, G.F. (compiler) 1996) conducted by IUCN identified 30 major wetlands (above 8ha) covering approximately 1 million hectares. The listed wetlands are primarily located in the more densely populated lowlands of the country. The report highlights the importance of wetlands in terms of community livelihoods, environmental services and cultural heritage. MONRE, in collaboration with the MRC and IUCN are planning to conduct a new wetlands inventory in 2013.

promotion of community based resource management and the introduction of adaptive planning will empower local stakeholders to take over and to further improve/sustain project outputs.

Finally, the project will benefit from a pre-existing and permanent institutional framework established for the management of the 2 Ramsar sites. The National Ramsar Steering Committee (NRSC) is composed of several key departments of the Ministry of Natural Resources and Environment (MONRE) and the Ministry of Agriculture and Forestry (MAFF). These two ministries, and their structures at provincial and district level are the most relevant government stakeholders for the project. MONRE's Department of Environmental Quality and Promotion (DEQP), executing partner of the LDCF project, act as the Secretariat of the NRSC and will therefore be in a privileged position to ensure strong coordination with some of the major baseline projects implemented by MONRE Departments (especially the IWRM Programme under Component 2 and the "Capacity Enhancement for Coping with CC" under Component 3). The DEQP will also be the national executing partner for the KFW project which is the most important baseline project. Project implementation at provincial and district level will be facilitated by MONRE's Provincial and District Offices which play a similar secretarial and coordinating in the multi-sector Provincial Ramsar Committees and the District (Ramsar) Implementation Teams. These sub-national structures include representatives of MAFF through which some of the baseline projects are implemented. The use of these sub-national and multi-sector Ramsar structures will therefore ensure strong coordination between the project and the smaller baselines project implemented locally (MAFF and WCS). IUCN has been mandated by the government to provide technical and managerial support to the Secretariat of the NRSC and its sub-national structures. IUCN's direct involvement in the project's institutional structure will ensure full coordination with baseline projects funded by IUCN (Components 1 and 2). This strong coordination will be further strengthened by selecting IUCN as a co-executing partner for the project.

LDCF's contribution to the development of appropriate infrastructure or the climate proofing of existing assets will require co-financing from baseline projects or in-kind contributions from local communities. This includes staff time, financial contributions, local construction material and the use of local facilities for project implementation. The contributing principle will ensure a better selection and prioritization of infrastructure related investments, will contribute to their quality and will ensure community ownership over these assets. The project will ensure that the maintenance and continuous improvement of infrastructure is included in district planning or community based management plans as an essential element of CC adaptation and disaster risk reduction or management. Maintenance and improvement of infrastructure will be included in the planning tools developed under Component 3 and will therefore be included in capacity building activities of the project. Capacity building will integrate maintenance as an important element of adaptation planning and will promote the establishment of trained user groups.

The replication of experiences gained in these 'adaptation hotspots' which combine high climate impact and significant adaptation potential, will help focus adaptation efforts in the more populated lowlands of Lao PDR which remain key to the country's food security and overall development. Project outputs such as vulnerability assessment and planning tools, improved national and local capacities and the availability of practical examples of assessments, measures and local plans, will be used to develop a detailed and costed national adaptation and disaster management programme for wetlands. This plan should facilitate the replication of project experiences in the many wetlands around the country. Similar to the proposed project, the future national programme should help mobilise the necessary climate finance and leverage substantial provincial and district level government co-finance as floodplain agriculture and the development of irrigated agriculture will remain a national priority¹⁶. Securing funding will be essential for the programmatic up-scaling and replication of project results. This national programme will also be 'plugged-in' to key national sector programmes such as the Development and Investment Master Plan for Agriculture or the National Integrated Water Resources Management Programme and the National Action

¹⁶ The development of rice cultivation in lowland areas of Lao PDR is one of the main priorities of the current Agriculture Development and Investment Master Plan as it will contribute to food security and the contribution of agriculture to GDP growth.

Plan on Climate Change Programme. This will further facilitate the replication and up-scaling of project results.

A.2 Stakeholders: Identify key stakeholders (including civil society organizations, indigenous people, gender groups, and other as relevant) and describe how they will be engaged in project preparation.

The MONRE’s Department of Environmental Quality Promotion, focal point for the Ramsar Convention, will be the lead government agency during project formulation and will facilitate the national and sub-national consultations and studies to be undertaken during the PPG phase. This will include the design of project coordination and management mechanisms at different levels and across ministries. MONRE’s Department of Disaster Management and Climate Change, Department of Water Resources, Department of Meteorology and Hydrology, Department of Forest Resources Management and the Lao National Mekong Committee Secretariat will 1) participate in stakeholder consultations, 2) provide the necessary background information and data, and 3) will review the project proposal.

The MAF’s National Agriculture and Forestry Research Institute (implementing LDCF’s IRAS or "Improving the Resilience of the Agriculture Sector in Lao PDR to Climate Change Impacts" project), the Department of Irrigation, the Department of Planning and the Department of Livestock and Fisheries will contribute to project formulation by 1) participating in stakeholder consultations, 2) reviewing the final project proposal, and 3) by providing the necessary information and data to the project formulation team.

Provincial, district and village level stakeholders will be critical to the project development process. The following local stakeholders, already involved in the development of this PIF, will be consulted during the PPG phase: a) Provincial Ramsar Committees and corresponding District Implementation Teams (including provincial/district governors, provincial/district line agencies (including MONRE and MAF) and community representatives); b) Provincial and District Disaster Management Committees; c) River Basin Committees for the Sekong and Xe Bang Hieng Rivers; and d) Local Civil Society and Mass Organizations (e.g. Lao Women's Union).

Development Partners/projects (IUCN, KFW, WCS, ADB, UNDP, WWF, WB, MRC and FAO) will participate in stakeholder consultations and will contribute to project design to 1) ensure the project builds and past and on-going initiatives, 2) to promote early coordination and collaboration and to contribute to the development of future coordination mechanisms, and 3) to confirm project co-financing and maximize future scaling up opportunities. As a member of the National Ramsar Committee, IUCN has been mandated by the government to assist with the development and implementation of management plans for the XC and BKN Ramsar sites. IUCN will therefore be an Executing Partner during project development and implementation.

A.3 Risks Indicate risks, including climate change risks, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, propose measures that address these risks to be further developed during the project design (Table format acceptable).

Risk	Level	Mitigation
Low staffing and technical capacities in National Executing Partner	Medium	MONRE, the national Executing Partner, is a newly established ministry and is only progressively establishing its provincial and district level structures. Staffing is still limited and capacities are relatively low. These factors might affect effective project implementation on the ground. The project will use pre-existing multi-stakeholder management structures led by provincial and district governors and involving a wider range of well-established line agencies. The project will also provide the necessary technical and managerial support to strengthen MONRE's sub-national offices and train their staff.

Lack of integrated and collaborative approaches to sustainable natural resources management, climate change adaptation and rural development in general	Medium	Climate adaptation and disaster management, especially in complex agro eco-systems such as wetlands, require cross-sector and integrated approaches involving a number of line agencies. Despite the wider range of responsibilities (climate change and disaster, water resources, protected areas, land, hydro-meteorology) and the stronger executive power of the new Ministry of Natural Resources and Environment, project implementation will require active involvement of other sectors and the Ministry of Agriculture and Forestry (MAF) in particular. The use of established multi-sector mechanisms such as the Provincial Ramsar Committees and the District Ramsar Implementation Teams for project implementation and linkages to River Basin Committees and Disaster Management Committees will ensure cross-sector collaboration and better coordination among agencies and projects.
Baseline information available is not site specific	Low	Climate science, information and analysis contained in the NAPA, national communications and global models remains broad and could affect the development of effective and site specific adaptation and disaster management measures and plans. The project will therefore conduct initial participatory vulnerability assessments, making use of site specific data and local climate and disaster related knowledge. Project interventions will also strengthen 'no regret' measures that will improve the management and therefore resilience of the wetlands. Finally, the project will build local capacities to better understand climate risks and to plan adaptation measures based on existing coping mechanisms and adaptation pilots. This capacity to 'adapt adaptation' will help mitigate risks related to the current limitation of climate science and information.
Increased pressure on wetland ecosystems	High	There is a chance pressure on wetlands eco-systems will continue to grow due to over-exploitation of resources, intensification and expansion of agriculture and unsustainable coping mechanisms. The project will promote an integrated or eco-systems based approach to adaptation and will contribute to the development of alternative livelihoods which are less dependent on the exploitation or use of wetlands resources.

A.4 Coordination: Outline the coordination with other relevant GEF financed and other initiatives.

MONRE's internal coordination mechanisms will ensure strong linkages (during both formulation and implementation) between the project and baseline projects/programmes implemented by MONRE's central departments and sub-national offices: 1) the pipeline KFW Wetlands Management Programme, 2) the MRC Climate Change Adaptation Initiative, 3) the ADB "Capacity Enhancement for Coping with Climate Change" project, 4) the WB/ADB National Water Resources Management Programme, 5) IUCN's Water and Wetlands Programme, and 6) the WCS/MMG Siamese Crocodile Conservation Programme. These development partners already consulted during the development of the PIF will be closely involved during project formulation and will eventually become members of the Project Steering Committee. Relevant MAF departments will contribute to project formulation and will also be represented in the Project Steering Committee. Sub-national MAF Offices will be part of the local project management structure and will co-finance the project. Coordination and collaboration between the project and GEF financed initiatives is outlined in the table below:

GEF Financed Initiatives	Coordination	Collaboration
UNDP LDCF project "Improving the Resilience of the Agriculture Sector in Lao PDR to Climate Change Impacts" (IRAS) implemented by the National Agriculture and	- Joint annual review and planning meetings between the different UNDP and FAO LDCF projects could be envisaged; - Provincial and District level MAF Offices,	The project will benefit from, complement and contribute to several IRAS activities (during overlap in 2014-2015): 1) Initial baseline data collected in Savannakhet Province (Champhone District in particular) by the IRAS project will inform the initial Vulnerability

<p>Forestry Research Institute (NAFRI), MAF (Savannakhet and Xayabury provinces)</p>	<p>implementing IRAS field activities in Savannakhet Province and more specifically in Champhone District are members of the Provincial Ramsar Committee and the Champhone District Implementation Team for the XC wetlands. These structures will be in charge of local level project implementation. - The project could conduct joint capacity building activities with the IRAS project.</p>	<p>Assessment for XC. Results of the Vulnerability Assessments in both XC and BKN will in turn reinforce climate vulnerability data and information for the agricultural sector compiled by the IRAS project.</p> <p>2) The project will be able to build on the valuable experience gained from the IRAS CCA pilots, especially in Champhone District. In Champhone on-farm pilots are being implemented in 8 villages and are focused on rice cultivation, crop diversification, small-scale husbandry and aquaculture. By the time the project starts implementing CCA and disaster management measures (2015), sector specific IRAS interventions will have benefited from a number of years of consolidation and will be drawing to an end. This will offer the project a rare opportunity to build on these achievements, giving it the longer term perspective and scale needed for the development of a more integrated, multi-sector and eco-systems based approach to adaptation in the XC but also BKN wetlands.</p> <p>3) The project will also benefit from capacity building activities implemented by the IRAS project. Improved capacity of the MAF offices in Savannakhet Province and Champhone District in particular will be an asset when conducting a comprehensive vulnerability assessment, designing integrated CCA and disaster management measures and developing long term CCA planning for XC. IRAS's contribution to mainstreaming CCA into sector policies and plans will also guide and inform the development of site specific (XC and BKN) and national CCA and disaster management plans for wetlands.</p>
<p>The recently approved UNDP LDCF project on "Effective Governance for Small Scale Rural Infrastructure and Disaster Preparedness in a Changing Climate" implemented by the Department of National Disaster and Climate Change (DDMCC), MONRE (Saravan and Sekong Provinces).</p>	<p>Joint annual review and planning meetings between the different UNDP and FAO LDCF projects could be envisaged. The project could also conduct joint capacity building activities with the UNDP LDCF project.</p>	<p>The project will benefit from UNDP LDCF activities and experiences (during overlap in 2014-2017) and will inform project activities in terms of 1) mainstreaming CCA in village and district level planning, 2) the design of CC resilient small scale infrastructure or climate proofing of existing infrastructure, especially in the agricultural sector and 3) protection of small scale infrastructure through eco-systems based adaptation. UNDP's LDCF project will benefit from wetlands specific experiences and activities implemented by the project and which could be replicated in Saravan and Sekong Provinces. The CC vulnerability assessments and CCA planning tools to be developed by the project could be used to improve similar assessments and adaptation planning under the UNDP LDCF project.</p>
<p>Pipeline FAO PIF on "Enhancing the capacity for monitoring and analysis of climate variability and climate change impact on the agriculture sector to improve food security in</p>	<p>MONRE's Department of Meteorology and Hydrology and MAF's Department of Planning and Cooperation, executing agencies of the proposed agro-meteorology project, will be member of the Project Steering</p>	<p>Most proposed activities such as 1) the improvement of agro-meteorological monitoring and communication infrastructure at national and provincial level, 2) the enhancement of facilities to access and analyse agro-meteorological information at national and provincial levels, 3) the strengthening of institutional and technical capacity to facilitate data sharing, archiving, analysis to provide improved agro-meteorological</p>

Lao PDR”.	Committee. Joint annual review and planning meetings between the different UNDP and FAO LDCF projects could be envisaged.	information products, 4) the strengthening of institutional and technical capacity to interpret, analyze and use agro-meteorological information in agriculture at all levels, 5) the development of high resolution climate change scenarios (baseline and future) of for all agriculture production areas developed development of adaptation strategies, will contribute to better data quality available to project stakeholders and will therefore inform the development of appropriate adaptation and disaster management measures and long term plans.
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B. DESCRIPTION OF THE CONSISTENCY OF THE PROJECT WITH:

B.1 National strategies and plans or reports and assessments under the relevant conventions, if applicable, i.e. NAPAS, NAPs, NBSAPs, national communications, TNAs, NCSAs, NIPs, PRSPs, Biennial Update Reports, etc.

The National Adaptation Programme of Action (NAPA, 2009) has identified agriculture, water resources, forestry and health as priority sectors. The project will address key NAPA priorities linked to water resources and agriculture by contributing to the following NAPA Priority 1 and Priority 2 Activities:

First Priorities for the Water Resources (WR) & Agriculture (A) sectors

- Awareness raising on water and water resource management (WR);
- Mapping of flood-prone areas (WR);
- Establish early warning systems for flood-prone areas (WR);
- Strengthen institutional and human resource capacities related to water and water resources management (WR);
- Promote secondary professions in order to improve the livelihoods of farmers affected by natural disasters induced by climate change (A).

Second Priorities for the Water Resources (WR) & Agriculture (A) sectors

- Conservation and development of major watersheds (WR);
- Repair/rehabilitate infrastructure and utilities damaged by floods in agricultural areas (WR);
- Land use planning in hazard prone areas (WR);
- Technical capacities of local agricultural officers in natural hazard prone areas strengthened (A);
- Establishment and strengthening of farmers groups in natural hazard prone areas (A);
- Develop appropriate bank erosion protection systems for agricultural land in flood prone areas.

The National Climate Change Strategy (2010) outlines both adaptation and mitigation priorities in key sectors including agriculture, food security, forestry, land use and water resources. Proposed approaches in the water sector are the integration of climate risks into planning processes, the development of reliable early warning systems to reduce disaster impacts and the downscaling of climate and hydrological models to the river basin scale. The proposed project will narrow down these approaches by focussing on very distinct, vulnerable and important parts of river basins.

The project supports the nine policy priorities under the National Water Resources Policy: 1) Institutional strengthening and coordination; 2) Legislation, plans and their implementation; 3) River basin and sub basin water resource planning; 4) Data collection and analysis; 5) Water allocation ; 6) Protection of water quality and eco-systems; 7) Management of floods, droughts and climate change; 8) Financial aspects of water resource management; 9) Awareness, participation and capacity building.

The Government has developed a corresponding draft National Water Resource Strategy and Action Plan (2011 to 2015) with support from ADB providing a comprehensive set of programs and activities linked to 9 major policy statements. This project will be fully aligned with several of the priority programmes and activities and *Programme 7, Activities 7.1, 7.2 and 7.3* “Manage Water Resources to Mitigate Impacts of Floods, Droughts and Climate Change” in particular.

B.2 GEF focal area and/or fund(s) strategies, eligibility criteria and priorities

Through Component 1, the project activities are aligned with CCA-2 Outcome 2.1 ‘Increased knowledge and understanding of climate variability and change-induced threats at country level and in targeted vulnerable areas’. More specifically it will focus on the development of a participatory CC Vulnerability Assessment tool and conducting detailed vulnerability assessments in the 2 targeted wetlands sites.

Through Component 2, the project activities are aligned to CCA-1 Outcome 1.2 ‘Reduced vulnerability to climate change in development sectors’ and Outcome 1.3 ‘Diversified and strengthened livelihoods and sources of income for vulnerable people in targeted areas’. More specifically, the project will focus on wetlands, associated eco-systems services, assets and livelihoods as a development sector but also as a targeted vulnerable area. Investments under Component 2 will address specific climate impacts on these fragile eco-systems, the most important sources of livelihoods they provide and agriculture practices in and around wetlands. Component 2 will also improve wetlands dependent livelihoods and will develop alternative sources of income to reinforce and diversify livelihoods and therefore resilience of local farmer communities.

Through Component 3, the project activities are aligned to CCA-1 Outcome 1.1 ‘Mainstreamed adaptation in broader development frameworks at country level and in targeted vulnerable areas’. More specifically Component 3 will incorporate CC adaptation and disaster management into site specific wetlands management plans, corresponding River Basin or Protected Area management plans and relevant local development plans. The project will also assist MONRE in preparing a costed programme for CC change adaptation and disaster management in wetlands areas that will be incorporated in relevant national planning processes. This component will also develop a CCA and disaster management planning tool that will facilitate the mainstreaming of adaptation and disaster management in wetlands areas in local planning processes.

Consistent with the Conference of Parties (COP-9), the proposed project will implement priority interventions addressed in Lao PDR’s NAPA, therefore satisfying criteria outlined in UNFCCC Decision 7/CP.7 and GEF/C.28/18. It will address urgent and immediate climate change adaptation needs and leverage additional co-financing resources from bilateral and other multilateral sources. The Government requests the LDCF to finance the additional costs of achieving sustainable development imposed on Lao PDR by the impacts of climate change. It is country-driven, cost-effective, and focused on immediate needs of vulnerable people, especially women, living in an around wetlands areas which are particularly prone to increasing incidence of floods and droughts. The project focus is therefore aligned with the scope of expected interventions as articulated in the LDCF programming paper and decision 5/CP.9. As climate impacts fall disproportionately on the poor, the project recognizes the link between adaptation and poverty reduction (GEF/C.28/18, 1(b), 29).

B.3 The GEF Agency’s comparative advantage for implementing the project

FAO has a long standing experience in working closely with communities to help them increase their agricultural productivity, while ensuring that the natural resources they depend on are not depleted. FAO brings in a wealth of experience in sustainable agriculture, food security and nutrition, livelihoods

improvement, natural resources management, disaster risk reduction and rural development. This expertise allows FAO to support countries in transitioning to climate-smart agriculture and in increasing eco-system and livelihood resilience through sustainable natural resources management. FAO provides implementation support to projects designed specifically to address climate change adaptation, climate-related disaster risk management or a combination of adaptation and mitigation. This means that while these activities reduce existing adaptation deficits and lay a foundation for long term resilience, they will simultaneously enhance sustainable production increases and food security. FAO has developed a wide range of innovative, user-friendly data systems and tools for assessing climate impact and vulnerabilities and for planning adaptation practices.

In Lao PDR, FAO has been engaged in the forestry, fisheries and biodiversity sectors since 1980. In 2007, FAO supported the development of a dedicated fisheries and aquaculture law introducing new principles of fisheries co-management. A number of projects have piloted and demonstrated integrated livestock, crop and fish production and the viability of semi-intensive fish production methods. The combination of experiences in the natural resources management sector and integrated agriculture will allow FAO to use past field level and capacity building experiences to work in a complex agro-ecological environment such as wetlands.

FAO, together with WFP is leading the Food Security and Nutrition Cluster of the Inter-Agency Standing Committee for Disaster Management. FAO conducted a nationwide Food Security Risk and Vulnerability Survey as part of the 2011 agricultural census. This information and experience will help conduct the more site specific vulnerability assessment to be undertaken by the project. FAO's experience in the implementation of post-disaster emergency response projects and its current assistance in developing the Disaster Management Plan for the agricultural sector in Lao PDR, demonstrates the in country expertise and mandate to work on climate and disaster risk reduction at both field and strategic levels.

PART III: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT(S) AND GEF AGENCY(IES)

A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S): (Please attach the [Operational Focal Point endorsement letter\(s\)](#) with this template. For SGP, use this [OFP endorsement letter](#)).

NAME	POSITION	MINISTRY	DATE (MM/dd/yyyy)
Mr. Khampadith Khammounheuang	Director General of the Environmental Quality Promotion Department	MINISTRY OF NATURAL RESOURCES AND ENVIRONMENT	JUNE 6, 2013

B. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF/LDCF/SCCF/NPIF policies and procedures and meets the GEF/LDCF/SCCF/NPIF criteria for project identification and preparation.					
Agency Coordinator, Agency name	Signature	DATE (MM/dd/yyyy)	Project Contact Person	Tel.	Email Address
Gustavo Merino Director Investment Centre Division Technical Cooperation Department FAO TCI-Director@fao.org Barbara Cooney FAO GEF Coordinator Email: Barbara.Cooney@fao.org Tel: +3906 5705 5478		September 9, 2013	Purushottam Mudbhary, FAO Representative Lao PDR	+856 (0)21 413205	Purushottam.Mudbhary@fao.org