



# REQUEST FOR CEO ENDORSEMENT/APPROVAL

PROJECT TYPE: Full-sized Project

THE LEAST DEVELOPED COUNTRIES FUND FOR CLIMATE CHANGE (LDCF)<sup>1</sup>

**Re-Submission Date: September 30, 2010**

## PART I: PROJECT INFORMATION

GEFSEC PROJECT ID:

GEF AGENCY PROJECT ID: 3868

COUNTRY(IES): Lao PDR

PROJECT TITLE: Improving the Resilience of the Agriculture Sector in Lao PDR to Climate Change Impacts

GEF AGENCY(IES): UNDP

OTHER EXECUTING PARTNER(S): Ministry of Agriculture and Forestry (MAF), through NAFRI

GEF FOCAL AREA: Climate Change - Adaptation

Expected Calendar (mm/dd/yy)	
Milestones	Dates
Work Program (for FSP)	
Agency Approval Date	October 2010
Implementation Start	January 2011
Mid-term Review (if planned)	June 2013
Project Closing Date	December 2014

## A. PROJECT FRAMEWORK

**Project Objective:** Food insecurity resulting from climate change in Lao PDR minimized and vulnerability of farmers to extreme flooding and drought events reduced as part of an applied ecosystem approach

Project Components	Investment, TA, or STA <sup>b</sup>	Expected Outcomes	Expected Outputs	LDCF Financing <sup>a</sup>		Co-financing <sup>a</sup>		Total (\$) c = a+b
				(\$ a)	%	(\$ b)	%	
CC Knowledge Management	TA	1. Increased knowledge and understanding of climate variability and climate induced threats on agricultural production, food security and vulnerability, in Lao PDR	1.1. Existing climate hazard and vulnerability information for Lao PDR compiled and integrated into an agriculture and climate risk information system, coordinated by NAFRI (established under Output 1.4.) leading to a long-term warning system. 1.2. Scenarios for agricultural production in Lao PDR assessed on the basis of local expertise, regional and global Climate Change models 1.3. Agricultural land-use planning in flood- and drought-prone areas analyzed and alternative land use plans developed, based on climate-risk scenarios and long-term warning indicators 1.4. Comprehensive national long-term information system for flooding and drought-related hazards and vulnerabilities, and the effects on agriculture, established, managed and updated by NAFRI	498,070	19.2	2,095,000	80.8	2,593,070
CC Capacity Development and Policy	TA	2. Capacities of sectoral planners and agricultural producers	2.1. Relevant stakeholders in MAF, WREA, MPI, LMA, targeted PAFOs, and other relevant GoL agencies trained	781,770	24.1	2,458,728	75.9	3,240,498

<sup>1</sup> This template is for the use of LDCF Adaptation projects only.

		strengthened to understand and address climate change – related risks and opportunities for local food production and socio-economic conditions	to understand Climate Change risks for agricultural production and review policy options for enhanced food security (applied training) 2.2. Climate resilient land-use planning integrated into Lao PDR's poverty reduction and agricultural policies & action plans 2.3. Agricultural officers, extension workers, farmer cooperatives and TSC (Technical Service Center) members in target districts trained in climate change impacts on agricultural production and socio-economic conditions, and potential community-based adaptation options (e.g. agro-forestry, conservation agriculture, replacement/refinement of slash and burn practice, etc) 2.4. District Disaster Management Committees in target districts trained in climate risk assessment and potential community-based risk reduction strategies, including periodical ground practice with communities					
Community based CC adaptive rural practice	TA	3. Community-based adaptive agricultural practices and off-farm opportunities demonstrated and promoted within suitable agro-ecological systems	3.1. Resilient elements in existing farming systems identified and thoroughly strengthened 3.2. Supply chains for different climate-resilient crops, livestock, etc., and farming inputs analyzed and economic impacts/market barriers assessed 3.3. Climate resilient cropping, livestock, fisheries and forestry practices introduced across at least 1 flood-prone and at least 1 drought-prone area 3.4. Diversified agriculture, livestock, fish, vegetables, NTF production, and alternative feasible off-farm activities demonstrated in target districts where farming communities are dependent on rain-fed crops 3.5. Rainfall capture, storage and adaptive irrigation and/or drainage management, and small-scale flood protection measures introduced in target	2,699,190	57.6	1,988,000	42.4	4,687,190

			drought-prone districts where rainfall is becoming more variable.					
CC Adaptation Learning	TA	4. Adaptation Monitoring and Learning as a long-term process	4.1. Project lessons captured in systematic monitoring, and periodically disseminated through, the Adaptation Learning Mechanism (ALM) and other suitable regionally based networks. 4.2. Project knowledge shared with other countries in the Greater Mekong Sub-region facing climate-induced drought and flooding hazards to agricultural production through conferences and workshops at NAFRI 4.3. Project knowledge incorporated into national flood and drought prevention and agricultural training programmes in Lao PDR	210,780	20.9	798,500	79.1	1,009,280
5. Project management				255,640	40.3	378,320	59.7	633,960
6. Monitoring & Evaluation (included in figures above as share of components)				120,000	100	0	0	120,000
<b>Total Project Costs</b>				4,445,450	36.6	7,718,548	63.4	12,163,998

<sup>a</sup> List the \$ by project components. The percentage is the share of LDCF and Co-financing respectively to the total amount for the component.

<sup>b</sup> TA = Technical Assistance; STA = Scientific & Technical Analysis

**B. SOURCES OF CONFIRMED CO-FINANCING FOR THE PROJECT** (expand the table line items as necessary)

<i>Name of Co-financier (source)</i>	<i>Classification</i>	<i>Type</i>	<i>Project</i>	<i>%*</i>
Government of Lao PDR Project Co-finance	National Government	Parallel	4,764,969	61.7%
UNDP		Parallel	2,575,259	33.4%
GoL/NAFRI Contribution	National Government	In-kind	378,320	4.9%
<b>Total Co-financing</b>			7,718,548	100%

- Percentage of each co-financier's contribution at CEO endorsement to total co-financing.

**C. CONFIRMED FINANCING PLAN SUMMARY FOR THE PROJECT (\$)**

	<b>Project Preparation Amount (a)</b>	<b>Project (b)</b>	<b>Total c = a + b</b>	<b>Agency Fee</b>	<i>For comparison: LDCF Grant and Co-financing at PIF</i>
LDCF financing	100,000	4,445,450	4,545,450	454,545	4,545,450
Co-financing	100,000	7,718,548	7,818,548		4,545,450
<b>Total</b>	200,000	12,163,998	12,363,998	454,545	9,090,900

**D. FOR MULTI AGENCIES/COUNTRIES (IN \$)<sup>1</sup>**

N/A

**E. PROJECT MANAGEMENT BUDGET/COST**

<i>Cost Items</i>	<i>Total Estimated person weeks</i>	<i>LDCF (\$)</i>	<i>Co-financing (\$)</i>	<i>Project total (\$)</i>
<i>Local consultants* PSU</i>	799	230,800	190,000	420,800
<i>International consultants*</i>	0	0	0	0
<i>Office facilities, equipment, vehicles and communications*</i>		16,200	188,320	204,520
<i>Travel* PSU only</i>		8,640	0	8,640
<b>Total</b>	<b>0</b>	<b>255,640</b>	<b>378,320</b>	<b>633,960</b>

\* Details to be provided in Annex C.

#### F. CONSULTANTS WORKING FOR TECHNICAL ASSISTANCE COMPONENTS:

<i>Component</i>	<i>Estimated person months</i>	<i>LDCF(\$)</i>	<i>Co-financing (\$)</i>	<i>Project total (\$)</i>
<i>Local consultants*</i>	194	171,000	190,000	361,000
<i>International consultants*</i>	70	907,000		907,000
<b>Total</b>	<b>264</b>	<b>1,078,000</b>	<b>190,000</b>	<b>1,268,000</b>

\* Details to be provided in Annex C.

#### G. DESCRIBE THE BUDGETED M&E PLAN:

<b>Type of M&amp;E activity</b>	<b>Responsible Parties</b>	<b>Budget US\$ Excluding project team staff time</b>	<b>Time frame</b>
Inception Workshop and Report	<ul style="list-style-type: none"> <li>Project manager NAFRI</li> <li>MAF, NAFRI, UNDP CO, UNDP CCA</li> <li>Project Board</li> </ul>	Indicative cost: <b>10,000</b>	Within first two months of project start up
Measurement of Means of Verification of project results.	<ul style="list-style-type: none"> <li>MAF, NAFRI, UNDP CCA RTA/Project Manager will oversee the hiring of specific studies and institutions (project baseline), and delegate responsibilities to relevant team members.</li> </ul>	1 international, x National consultants for 4 weeks each  Indicative costs: <b>25,000</b> plus project team	Start, mid and end of project (during evaluation cycle)
Measurement of Means of Verification for Project Progress on output and implementation	<ul style="list-style-type: none"> <li>Oversight by NAFRI Project manager</li> <li>Project team</li> </ul>	National consultants  Indicative costs: <b>10,000</b> plus project team	Annually prior to ARR/PIR and to the definition of annual work plans
APR/PIR	<ul style="list-style-type: none"> <li>NAFRI Project manager and team</li> <li>Project Board</li> <li>UNDP CO</li> <li>UNDP RTA</li> <li>UNDP EEG</li> <li>MAF / NAFRI</li> <li>Project Task Force</li> </ul>	Operational budget	Annually
Periodic status/ progress reports	<ul style="list-style-type: none"> <li>NAFRI Project manager and team</li> <li>Project Board</li> <li>Project Task Force</li> <li>Local Integration Platforms</li> </ul>	Operational budget	Quarterly
Mid-term Evaluation	<ul style="list-style-type: none"> <li>GoL: MAF, NAFRI, MPI</li> <li>Project Board</li> <li>NAFRI Project manager and team</li> <li>UNDP CO</li> <li>UNDP RCU</li> <li>Project task Force</li> <li>Local Integration Platforms</li> </ul>	Indicative cost:  <b>22,000</b>  plus project team	At the mid-point of project implementation.

Type of M&E activity	Responsible Parties	Budget US\$ <i>Excluding project team staff time</i>	Time frame
	<ul style="list-style-type: none"> <li>External Consultants (i.e. evaluation team)</li> </ul>		
Final Evaluation	<ul style="list-style-type: none"> <li>GoL: MPI, MAF, NAFRI</li> <li>Project Board</li> <li>NAFRI Project manager and team,</li> <li>UNDP CO</li> <li>UNDP RCU</li> <li>Project Task Force</li> <li>Local Integration Platforms</li> <li>External Consultants (i.e. evaluation team)</li> </ul>	2 International, x National Consultants Indicative cost : <p style="text-align: right;"><b>40,000</b></p> plus project team	At least three months before the end of project implementation
Project Terminal Report	<ul style="list-style-type: none"> <li>Project manager NAFRI and team</li> <li>UNDP CO</li> <li>Project Board</li> <li>GoL, MAF, MPI</li> <li>local consultant</li> </ul>	National consultant(s) Indicative cost: <p style="text-align: right;"><b>3,000</b></p> plus project team	At least three months before the end of the project
Audit	<ul style="list-style-type: none"> <li>UNDP CO</li> <li>NAFRI Project manager and team</li> <li>Project Board</li> </ul>	Indicative cost per year: 2,500 <b>Total 10,000</b>	Yearly
Visits to field sites	<ul style="list-style-type: none"> <li>UNDP CO</li> <li>UNDP RCU (as appropriate)</li> <li>Government representatives</li> <li>NAFRI Project manager</li> <li>Project Board</li> <li>Project staff</li> <li>Project Task Force</li> <li>Local Integration Platform</li> </ul>	For GEF supported projects, paid from IA fees and operational budget	Yearly
<b>TOTAL indicative COST</b> Excluding project team staff time and UNDP staff and travel expenses		<p style="text-align: right;"><b>US\$ 120,000</b></p> (+/- 5% of total budget)	

## PART II: PROJECT JUSTIFICATION

### A. DESCRIBE THE PROJECT RATIONALE AND THE EXPECTED MEASURABLE ADAPTATION BENEFITS:

1. The proposed project will implement a top priority identified in the Lao People's Democratic Republic (Lao PDR) National Adaptation Programme of Action (NAPA), which was finalized and submitted to the UNFCCC on 22<sup>nd</sup> May, 2009. The NAPA process has identified four sectors as being highly vulnerable to climate change and requiring priority adaptation measures: agriculture, forestry, water resources, and health. The NAPA has confirmed that the primary climate change-related hazards in Lao PDR are floods and droughts and their adverse impacts on food security and agricultural production. Climate change is expected to have a range of impacts which includes increases in annual mean temperatures by around 0.1-0.3 °C per decade; a longer annual dry season; more intensive rainfall events; and more frequent and severe drought and flooding events. The 4<sup>th</sup> IPCC report (2007) indicates that the Mekong basin is expecting increasing maximum monthly flows of +35-41% and decreasing minimum monthly flows of 17-24% over the course of this century, which will substantially increase flooding risks in the wet season and water scarcity in the dry season.

2. While the economy of Lao PDR has grown considerably in the last two decades, with a significant slice of growth originating from the non-agricultural sector, sectors that create work and are skills-based have not grown in equal measure. As a result, the overall structure of the workforce has not changed, with around 80 percent of workers still engaged in subsistence-oriented agriculture and associated activities. Economic

growth is necessary, but not sufficient for poverty reduction. To continue to achieve significant reductions in poverty, Lao PDR needs to diversify its economy and give further attention to strengthening the agricultural and manufacturing sectors. This will allow for more broad based and equitable growth and skills development. Additionally, attention must be given to the development of rural infrastructure and improved opportunities and wages of the unskilled workers. Lao PDR has the potential for high rates of sustainable agricultural growth that are key to continued reduction of rural poverty; aiming for a rate of 5 to 6 percent in the next decade is reasonable. Achieving this will involve transitioning from reliance on extensive growth to a future that will depend more on intensive sources of growth. Agriculture and forestry sectors are the economic backbone of Lao PDR, producing approximately 40% of GDP and employing 80% of the labor force.

3. Yet the country currently faces widespread food insecurity with over a third of the population experiencing rice shortfalls of 2-6 months/year. Based on a 2007 country-wide National Risk and Vulnerability Assessment conducted by WFP, it is estimated that up to 46% of the rural population in Lao PDR - approximately 188,000 households most of whom are living in lowlands - are at risk of becoming food insecure because of either loss of access to natural resources, floods, drought, or a sudden increase in food prices. This is in addition to the 2 percent of people who are already chronically food insecure.

4. The major climate hazards to which Laos is regularly exposed include flooding caused by heavy rainfall during the raining season, drought caused by extended dry seasons, sudden flash-floods in the mountainous parts of the country, landslides and large-scale land-erosion on slopes, occasional windstorms and - recently - typhoons in the south. Being a country of watersheds and water catchments Laos is by nature heavily influenced by climate hazards. And yet there are considerable variations in hazard patterns across the country, and across the region. Often, these events can be very destructive not only altering the landscape, fauna, flora and vegetation, but also destroying public infrastructure, property, productive land, agricultural assets and upcoming harvests. As noted, 80% of the livelihoods in Lao PDR are associated to some form of agricultural activity. There is a high level of poverty in the rural areas, and poor farmers are especially vulnerable to climate hazards.

5. Newly present market forces, mainly through external investors and tourism, have started to re-structure agricultural production towards larger scale monocultures and away from more traditional subsistence and smallholder farming. The overall effect has been to delink a long established interdependence between farming and ecosystem services within the context of Lao PDRs several distinct agro-ecological zones – and to introduce farming systems that are less diverse and more vulnerable to climate related risks as a result.

6. The objective of the proposed project is to minimize food insecurity resulting from climate change in Lao PDR by reducing the vulnerability of farmers to extreme flooding and drought events. In order to achieve this and to help to increase the overall adaptive capacity of the agriculture sector in Lao PDR to a changing climate, and improve the resilience of food production systems, the project proposes the following four-pronged approach:

- I. Strengthening of the national knowledge and information base on climate change impacts in Lao PDR and their effects on agricultural production and food security;
- II. Enhancement of the capacity of sector planners and agricultural producers to understand and address climate change – related risks and opportunities for local food production;
- III. Demonstration and promotion of diversified and adaptive agricultural practices and other off farm livelihood alternatives at the community-level; and
- IV. Adaptation monitoring and learning as a long-term process that assures that lessons learnt do benefit the local population, as well as national policies and international Climate Change adaptation efforts.

Through this integrated approach the project can be considered an important contribution towards achieving and sustaining MDG #1 – Eradicate Extreme Poverty and Hunger in Lao PDR. Poverty in the country declined steadily from 46 percent to 33 percent during the decade 1992-2002, and the country is on course to attain the MDG target of halving poverty by 2015. But while the incidence of poverty has declined, and the poor are getting less poor on average, the share of the poorest quintile in national

consumption also fell from 9.6 percent to 8 percent. This suggests an increase in inequality during 1992-2002, thereby confirming evidence from other sources about increasing disparity among the poor and the non-poor.

7. Although some steps have been taken in respect of the above reasoning, for example through a SIDA-funded Upland Agriculture and Forestry Research Programme (implemented by NAFRI), there is an urgent need to strengthen adaptation efforts and implement a comprehensive programme that addresses key barriers to adaptation in the agricultural sector at all levels. This involves systematic integration of climate risk considerations into major agricultural sector policies (including agricultural sub-sector strategies); strengthening of institutional, organizational and individual capacities to understand the link between climate change and future food security; and introducing appropriate and resilient agricultural practices at the local level. Project outputs will ultimately feed into the design and adoption of specific agricultural planning and extension packages ("Climate Change Training and Adaptation Modules" CCTAM). This process will be accompanied with targeted training for provincial and district authorities, with a focus on planners and agricultural extension staff.

**B. DESCRIBE THE CONSISTENCY OF THE PROJECT WITH NATIONAL PRIORITIES/PLANS:**

8. The project is consistent with the food security focus of Lao's National Socio-Economic Development Plan (NSDEP 6, 2006-2010) and aligned to the tasks of the Technical Working Group on 'Food and Livelihoods Security and Agricultural Productivity' under the National Steering Committee on Climate Change (NSCCC) (established by the Prime Minister on 08/05/2008). By strengthening the information and knowledge base on climate change impacts, the proposed project will enable integration of climate risk data into hazard and vulnerability databases of the Ministry of Agriculture and Forestry (MAF) and the National Disaster Management Office (NDMO) under the Ministry of Labor and Social Welfare. Project results will inform the implementation of a Climate Change Strategy for Lao PDR which is currently being developed and which will include a dedicated component on adaptation in the agriculture sector.

According to the draft 7<sup>th</sup> NSDEP (2011-2015) different sectors, namely agriculture, forestry, energy, meteorology, urban planning, industry and health will work together to do interdisciplinary research on the impact of climatic change and the source of greenhouse gases, and seek appropriate methods for mitigating the impact. Efforts will be made to incorporate this into the next Five-year Plan, and to draw up strategies to mitigate the impact of climate change, in line with sectoral planning and the poverty reduction strategy. It is expected that the project will be able to provide substantial practical and thematic experience into this planning process.

9. Maintaining strong complementarities with the Vulnerability & Adaptation Assessment carried out under Lao's Second National Communication (SNC) to the UNFCCC, and making use of the regional Climate Change modeling performed under Thailand's SNC project, and similar works by other partners, e.g. the Mekong River Commission, the project will ensure that climate change scenario based planning is introduced to policy makers in the agriculture sector and beyond. The project will provide critical support to MAF to safeguard food security throughout the country and, at the same time, contribute to ASEAN agreements aimed at increasing food security at a regional level.

10. Under the most recent policies of the Ministry of Agriculture and Forestry, four targets are identified:

- I. Ensuring food security
- II. Commercialization of agriculture production
- III. Shifting cultivation stabilization for poverty reduction
- IV. Sustainable forest management

Because of the important impact of climate change on agricultural landscapes, and its recognized implications for food security, agricultural production and GDP, this project is of particular relevance to the first, second and third of these targets. The Ministry of Agriculture and Forestry has identified 13 measures to achieve these targets, including improvement of land use planning and surveying methods,

establishment of technical support at the village cluster level, and capacity building. Through supporting the development of land use plans for different climate scenarios in drought and flood-prone areas, in coordination with the National Land Management Authority the project will actively promote the integration of climate change considerations into land zoning and agricultural planning practices at national, provincial and district levels.

11. The key organization identified to coordinate the implementation of the proposed project is the National Agriculture and Forestry Research Institute (NAFRI), supported by the National Agriculture and Forest Extension Service (NAFES), the National Land Management Authority (NLMA), the National Disaster Management Office (NDMO), the respective Provincial institutions.

**C. DESCRIBE THE CONSISTENCY OF THE PROJECT WITH LDCF ELIGIBILITY CRITERIA AND PRIORITIES:**

12. Consistent with UNFCCC Conference of Parties (COP-9), the project will implement priority interventions in Lao PDR's NAPA and therefore satisfies 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 project requests the LDCF to finance the additional costs of achieving sustainable development imposed on eligible countries by the impacts of climate change. It is country-driven, cost-effective, and will integrate climate change risk considerations into land-use planning, agriculture and disaster risk reduction initiatives, which are priority interventions eligible under the LDCF guidelines. The project focus of safeguarding Lao PDR's food security against future climate risk by pursuing a range of adaptive agricultural and off-farm practices is 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).

**D. OUTLINE THE COORDINATION WITH OTHER RELATED INITIATIVES:**

13. By funding the additional costs of interventions necessary to meet the urgent and immediate adaptation needs for Lao PDR identified in the NAPA process, the project will ensure that the risks of climate change, including variability, are integrated into ongoing agriculture management practices and programmes. By integrating this project with programmes that promote baseline development needs in the agriculture sector, LDCF funding will protect baseline development investments in food security and assist Lao PDR to achieve MDG 1-Eradicate extreme Poverty and Hunger and UNDAF Outcome 1 ("By 2011, the livelihoods of poor, vulnerable and food insecure populations are enhanced through sustainable development within the MDG framework"). The Lao PDR has recently initiated (late 2008) its Second National Communication (SNC) to the UNFCCC. The Vulnerability and Adaptation Assessment under the SNC Project will directly tie into the climate knowledge and information-related deliverables of the proposed project and ensure that relevant climate models and scenarios are actively applied.

14. The Ministry of Agriculture and Forestry (MAF) will provide overall leadership and direction for the proposed project, and NAFRI, MAF, is expected to house the Project Implementation Unit. NAFRI will realize related research activities, and NDMO will implement activities that relate to disaster management. NLMA will deal with district land use planning. The extension and communication work would be undertaken through NAFES, Provincial Disaster Management Committees, provincial extension agencies and Village Cluster Service Centres. The project will ensure strong coordination and collaboration with important actors in the climate change, disaster management and agriculture sectors in Lao PDR, especially with ADB, AusAid, EU, World Bank, WWF, MRC, GTZ, IUCN, and AFD. Activities will be closely coordinated with:

- the MRC's Climate Change and Adaptation and Flood Management and Mitigation programmes;
- ADB support to develop community managed irrigation systems (loan 2086)
- ADB support to manage and mitigate against floods and droughts (proposed project: GMS-LAO Flood and Drought Risk Management and Mitigation);
- ADB's ongoing support to develop a National Climate Change Strategy;
- UNDP supported Second National Communication to the UNFCCC; and



- UNDP/UNEP Poverty Environment Initiative (PEI) which aims to build the long term capacity of the government to integrate environmental concerns in national development plans, investment management processes and poverty reduction strategies.

15. WWF and IUCN are developing climate change programmes, which focus primarily on climate change impact research and will feed into the proposed project (Component 1). Field activities related to adaptation and agricultural techniques (Component 3) will be coordinated closely with the Northern Uplands Programme which is currently being designed by AFD, EU, SDC and GTZ, as well as ADB and IFAD's Sustainable Natural Resource Management and Agricultural Productivity project for southern Lao PDR. SDC, UNDP and FAO's support to agro-biodiversity conservation have specific components that highlight agro-biodiversity as an important mechanism in adaptation to climate change, which will feed into the piloting of diversified and resilient agricultural practices. Baseline data on drought and flooding hazards in Lao PDR will be consolidated on the basis of input provided by the Mekong River Commission's Flood Management and Mitigation programmes; SEA START and JMA AGCM models, the Department of Meteorology and Hydrology, and others. Project locations have been chosen based on technical criteria as well as to complement the Ministry of Agriculture and Forestry's Northern Uplands Programme, the Sustainable Natural Resource Management and Agricultural Productivity Programme, and UNDP/FAO support to agro-biodiversity. The project will complement UNDP assistance to the National Disaster Management Office (NDMO) through the BCPR-funded initiation plan *Support for Disaster Risk Management in the Lao PDR* (No. 5873) and subsequent project (part of UNDP parallel co-finance).

#### E. DESCRIBE ADDITIONAL COST REASONING:

16. LDCF financing will be restricted to activities that expand on, and complement, existing baseline programs and projects, and are closely aligned with development priorities at the selected pilot sites. The additional activities required to improve the resilience of the agriculture sector in Lao PDR to climate change impacts are based on the following baselines:

##### **17. Outcome 1 / Component 1: Access to Climate Risk Information:**

**Baseline:** Basic regional climate change information has been compiled in the NAPA for Lao PDR. However, this information has not yet been comprehensively applied to the agricultural sector. Additionally, vulnerability information is highly scattered across different public and private sector entities, government departments and development agencies and has yet to be comprehensively consolidated and delivered to national stakeholders in a user-friendly and policy-relevant manner. Climate change data is collected sporadically by different agencies. Systematic analyses of data either does not take place, or is not distributed to partners. Academic and teaching institutions are only peripherally engaged in the process of CC and adaptation analyses. A number of international NGOs (e.g. IUCN, WWF) have carried out local and regional level studies recently, together with the Mekong River Commission which has compiled the most significant and comprehensive regional analysis available – providing an important starting point for this component of the project. UNDP is supporting the implementation of Lao PDR's Second National Communication to the UNFCCC which includes vulnerability and adaptation assessment focusing on agriculture and water resources and this will be carried out in parallel with the proposed project (Ministry of Environment and Natural Resources) and use the same structure of technical working groups. In addition there are four ongoing MAF/NAFRI implemented adaptation projects focusing on rice cropping and rice seed research that will provide some climate impact data as well as field tested adaptation options for crop and water management which can be disseminated at provincial level. These activities will show benefits to the project through the co-finance agreements made.

**Adaptation alternative:** Existing climate hazard and vulnerability information for Lao PDR for agricultural production will be systematically compiled, documented and assessed on the basis of global and regional climate change models. The information compiled will be used to analyze agricultural land-use planning in flood- and drought-prone areas and develop alternative land use plans for different climate scenarios. Based on the results of this analysis, climate risk projections will be integrated into a comprehensive national database for flooding and drought hazards and vulnerabilities to be established by the project. A functional system for the collection, distribution, and internalisation of climate-related risk information at the national, district, and local levels will promote the sharing of project knowledge both within Lao PDR and in the greater Mekong sub-region, together with important regional stakeholders such as the MRC. This information will then be made available to all other

interventions in the sector and inform the design of new policies, plans and investment programmes. Some information and analysis will be fed into the Agriculture and CC Working Group, established under the SNC process, and promote stronger links with this project and a conduit for ensuring that this SNC achieves a wider impact on agriculture sector planning also. The outcome is equally linked to the activities that will be undertaken at the national upstream/policy levels (Component 2) and at the downstream/community levels (Component 3). The differentiated impacts of climate change are gender dynamic and gender considerations will be given particular attention in the assessment and consolidation of vulnerability data. A technical connection between information pools and working groups at the Climate Change office (WREA) and NAFRI will be established.

## **18. Outcome 2 / Component 2: Policy Analysis and Capacity Building**

**Baseline:** The institutional and policy frameworks for agricultural production, food security and flood and drought prevention in Lao PDR do presently not consider mid- and long-term climate change risks. Capacity gaps at the national and provincial level to access, understand, interpret and apply climate risk information for agricultural planning purposes are prominent. At the district, kum ban and village level, technical service centres, farmer cooperatives and disaster management committees lack the financial resources and knowledge to effectively address robust and resilient decision making in the face of dynamic hydro-meteorological hazards. Poverty reduction strategies and agricultural land use plans in Lao PDR give limited consideration to climate variability and change, which has resulted in sub-optimal use of land and high vulnerability of farmers to climatic hazards. Agricultural planners and disaster management professionals are presently not able to efficiently translate climate risk projections into resilient planning and investment decisions that translate into long-term improved food and income security for local communities. The Ministry of Agriculture and Forestry, and most other GoL Agencies, besides WREA with the Climate Change Office, do not have human resources with an understanding of climate risks and adaptation. GoL staff typically have a very rudimentary understanding of contemporary CC issues, there is no system and few incentives in place to engender institutional knowledge building and learning. Consequently no specific agricultural extension packages for CC adapted agricultural practice exist so that farmers in more remote rural areas are left to fend for themselves. In recognition of these weaknesses MAF has recently launched a series of adaptation projects closely linked to the stated outcomes of the proposed LDCF financing and which provide the Government co-financing for this project. Research and extension work is designed to build adaptive capacity in rice based cropping systems; in the South improved farming and marketing systems will be developed with a focus on vulnerable rainfed agriculture; in the North uplands rice farming systems research is being carried out to improve productivity. However given the low level of understanding of climate change and related risks there is a danger that these initiatives produce research outcomes only with limited practical applicability.

**Adaptation alternative:** The project will build the capacity of sectoral planners in MAF, WREA, MPI, NLMA, NDMO and selected PAFOs and DAFOs to understand and plan for projected climate change impacts on agricultural production in Lao PDR. Climate risks will be integrated into agriculture (including land use) planning policies and strategies, helping to demonstrating the practical value of a comprehensive national database on climate risk. Capacity building activities will span from national to provincial and local levels, involving agricultural officers, extension workers, farmer cooperatives and local stakeholders. The project will ensure integration of climate risk projections and low-cost adaptation actions into the training programme for MAF, NDMO, NLMA, agricultural extension workers and local farmer groups. A committee used as “local integration platform” (LIP committee) will assure coordination, collaboration and information of all local partners, and will be the implementation and monitoring hub at sub-provincial level. A number of specific training and adaptation modules (CCTAAM) for the agriculture extension process will be developed with LDCF resources which will be widely applied in the target provinces and districts but available to be applied more widely also based on experience gained and availability of additional resources. Collectively these measures will provide a much broader basis of understanding and knowledge to be able to apply ongoing Government interventions in adaptation research and extension work effectively.

## **19. Outcome 3 / Component 3: Community-based climate risk reduction**

**Baseline:** Agricultural practices and extension services in Lao PDR have not yet been adapted to take climate change risks into account. There is a general lack of awareness about community-based approaches to address climate change risks and there is an urgent need for a framework of best practices that can be developed and adopted as a comprehensive and ecologically sensitive resilience approach to climate risk.

Livelihoods and coping ranges within communities will continue to deteriorate as a result of increased extremity and frequency of floods. More intensive rainfall events subsequent to longer dry periods will increase tendencies of land degradation, and changes in the distribution and severity of extreme drought and flooding events will increase vulnerability in hazard-prone agricultural areas. The majority of farmers rely on subsistent rain-fed rice farming for their daily staple and sale, and on wild meat and aquatic resources for their source of animal protein. With assistance from donors, the Government of Lao has been implementing various measures such as the establishment of public irrigation systems to reduce the vulnerability of farmers to extreme weather events and, thereby, improve food security. However, existing agricultural practices do not consider changes in tributary peak flows, changing rainfall intensities and prolonged dry spells, and are generally focusing on single crop production. As there is consistently less diversification in products, owing to growing import demands from neighbouring countries inducing monoculture practice, smallholder farmers are generally not able to cope with dynamic changes in the climatic variables that influence their crop health and yield.

**Adaptation alternative:** In close coordination with the National Agriculture and Forestry Extension Service (NAFES) and the Provincial Agriculture and Forestry Offices (PAFO), and through a highly participative approach, the demonstration and technical, economical and ecological analysis of climate resilient cropping schemes in flood- and drought-prone areas will be realized. Diversified agricultural production systems for farmers dependent on rain-fed crops will be introduced and demonstrated, and sustainable production checklists will be developed and applied. Assessment of existing and traditional systems, and strengthening of appropriate techniques will be carried out simultaneously to the introduction of new approaches. Demonstration sites will showcase household and community based rainfall capture, storage and adaptive irrigation systems in drought-prone agricultural areas, focusing on one micro-watershed in the north (primarily upland agro-ecological zone) and one in the south (lowland) of the country. Lessons learned can then be scaled up through adoption by NAFES and PAFO at a national level. Furthermore, community-based agricultural adaptation measures will be piloted in selected communities to promote the diversification of crops, the introduction of drought- and flood-resilient crop options, resilient farming methods and low-cost water conservation/irrigation technologies in areas prone to diminishing or highly variable rainfall. The adaptation measures will be made available to communities through the introduction of “Climate Change Training and Adaption Modules” (CCTAM) that cover the most common agricultural practices related to key crops. These CCTAMs contain a range of measures including training, ongoing technical advice and small scale physical investments. They will be used to help communities to develop village or Kumban level ‘implementation plans’ tailored to specific needs on the ground. The implementation plans will receive continuous extension support and monitoring over a period of 24 months to ensure that results are delivered. Target farmers will be identified through participatory rural appraisal methods. Pilot districts have been selected in the course of the PPG phase, based on the levels of exposure to drought and flooding hazards, socio-economic vulnerability and replication potential of project-related outputs and outcome.

## **20. Outcome 4 / Component 4: Adaptation monitoring and learning as a long-term process**

**Baseline:** The current knowledge about successful and unsuccessful climate risk management approaches in Lao PDR is not systematically captured and analyzed. Consequently there is no way for national, provincial and district authorities (sector planners) to learn from the lessons learned or to scale up successful activities. Overall data and information dissemination does not exist. Data is collected sporadically by different agencies but primarily kept for internal use. Systematic analyses of data does either not take place, or is not distributed to partners. The engagement of local stakeholders in monitoring and sharing of lessons is very limited as is the involvement of provincial and district institutions. The Second National Communications project is the only ongoing attempt to compile national level statistics and to disseminate these more widely. However the structure of this report is primarily focused on national reporting to the UNFCCC and its value for the organisation and dissemination of information within Lao PDR is more limited as a result. Regional initiatives such as UNEP/SIDA/SEI’s Adaptation Knowledge Platform have recently come into play and are making efforts to significantly increase the sharing of information and knowledge among Mekong countries. A recent initiative of the AKP hosted by UNDP was specifically focused on adaptation and agriculture bringing together all national agricultural institutes in the region.

**Adaptation alternative:** Project lessons will be captured in, and disseminated through, the global Adaptation Learning Mechanism (ALM) platform and evolving regional networks such as the Adaptation Knowledge

Platform (AKP). Project knowledge will be shared with other regions and countries facing climate-induced drought and flooding hazards to agricultural production, made accessible through the AKP and ALM's web-based interface, on-line dialogues, and printed material. In cooperation with other partners bi-annual regional conferences for the GMS countries will be organized. Annual technical adaptation workshops for Lao professionals of different sectors will be implemented on the NAFRI compounds. A specific information programme for villagers and farmers will be delivered through the CCTAAM agricultural extension process (component 2 and component 3).

**21. INDICATE THE RISK THAT MIGHT PREVENT THE PROJECT OBJECTIVE(S) FROM BEING ACHIEVED AND OUTLINE RISK MITIGATION MEASURES:**

20. There is a risk that the integration of climate risks into land use planning and agricultural strategies/plans will face difficulties due to limited commitment/understanding of climate change issues within relevant stakeholders at national and local levels. This risk will be mitigated through dedicated capacity development Outputs and strong linkages to the mandate of the National Committee for Climate Change; the Second National Communications to the UNFCCC; and the process of elaborating the Agriculture Strategy for Lao PDR to 2020. Disaster management committees will also be critical stakeholders at all levels, and will serve to raise practical levels of awareness of the implications of climate change. Strong linkages of the proposed project with ongoing capacity building programmes of UNDP as well as a range of baseline activities implemented by the Lao PDR government will minimize these risks, and securing of the necessary co-financing for this project has considerably strengthened the profile of this project.

21. A lack of coordination between the national policy level and the communal demonstration levels may impact on the project timeline. There is a risk of limited technical capacity at the demonstration sites to monitor project lessons and synthesize their value for policy-related processes. In order to mitigate against these risks, the project has been carefully designed in its organizational structure; ensuring that a large number of stakeholders can participate in the process while management remains lean, effective and efficient. Nonetheless, quality of international and national staff, as well as quality of personnel available under sub-contracts, will be a decisive element for successful implementation.

22. The UNDP Risk Log is attached outlining for each level of the Results Framework a most potential risk (strategically, operationally, technically).

On management level the highest risks for failing to achieve the "agriculture adaptation to climate change objective" are:

- Fragmentation of project into usual standard operations implemented by different agencies (missing the strategic CC objective and the core problem, see also chart below), and
- Inconsistent management structure caused by too many stakeholders on several levels.

The management arrangements made for the project will reduce these risks, see also chapter 5 of the project document.

23. The project will ensure that a proper communication and awareness strategy is in place so that lessons learned can be transformed into accessible language. Core elements of the strategy will be sketched out during the inception phase.

**22. EXPLAIN HOW COST-EFFECTIVENESS IS REFLECTED IN THE PROJECT DESIGN:**

24. The proposed project is based on the promotion and dissemination of community-based, low-cost adaptation options in the agriculture sector, focusing on diversified crop choices, resilient farming techniques and freshwater conservation. As it is closely aligned to a range of baseline rural development initiatives on the ground, it will aim at a strategy of alignment, demonstration and replication rather than at an extensive technology-push. Furthermore, throughout the NAPA process, the selection criteria used to identify and prioritize the list of activities in the sectors of agriculture, forestry, water and water resources, included: loss of lives and livelihood security; human health; food security and agriculture; availability of potable water for using and drinking;

infrastructure development; cultural, historical and natural heritage; sustainable use and conservation of biodiversity; land use and forest protection; other environmental amenities; and administrative and personnel capacity building. As such, the investments selected for the LDCF are not only the most urgent but also most cost-effective. In line with economic rationalization, given current knowledge of climate change and socio-economic conditions, the proposed interventions represent the least-cost options for adaptation as more expensive alternatives are postponed. Alternative options to the proposed project, such as the retrofitting of critical infrastructure, would ultimately imply much higher investments. Furthermore, the project's three-pronged knowledge management, capacity building and community-based adaptation approach will have a better cost-benefit ratio than the scaling up of disaster response systems in Lao PDR, which would only come into effect after food security has already been adversely impacted and resulted in widespread human, material and immaterial losses.

25. Assuming that implementation of the project is successful and tangible outputs and outcomes do materialize within the first 2-3 years there is a considerable potential to attract further co-finance into the operational framework, or for future duplication and replication. The project has a good ratio between project operation cost and contractual deliveries, and will be most economical if the potential benefits in parallel co-finance do materialize.

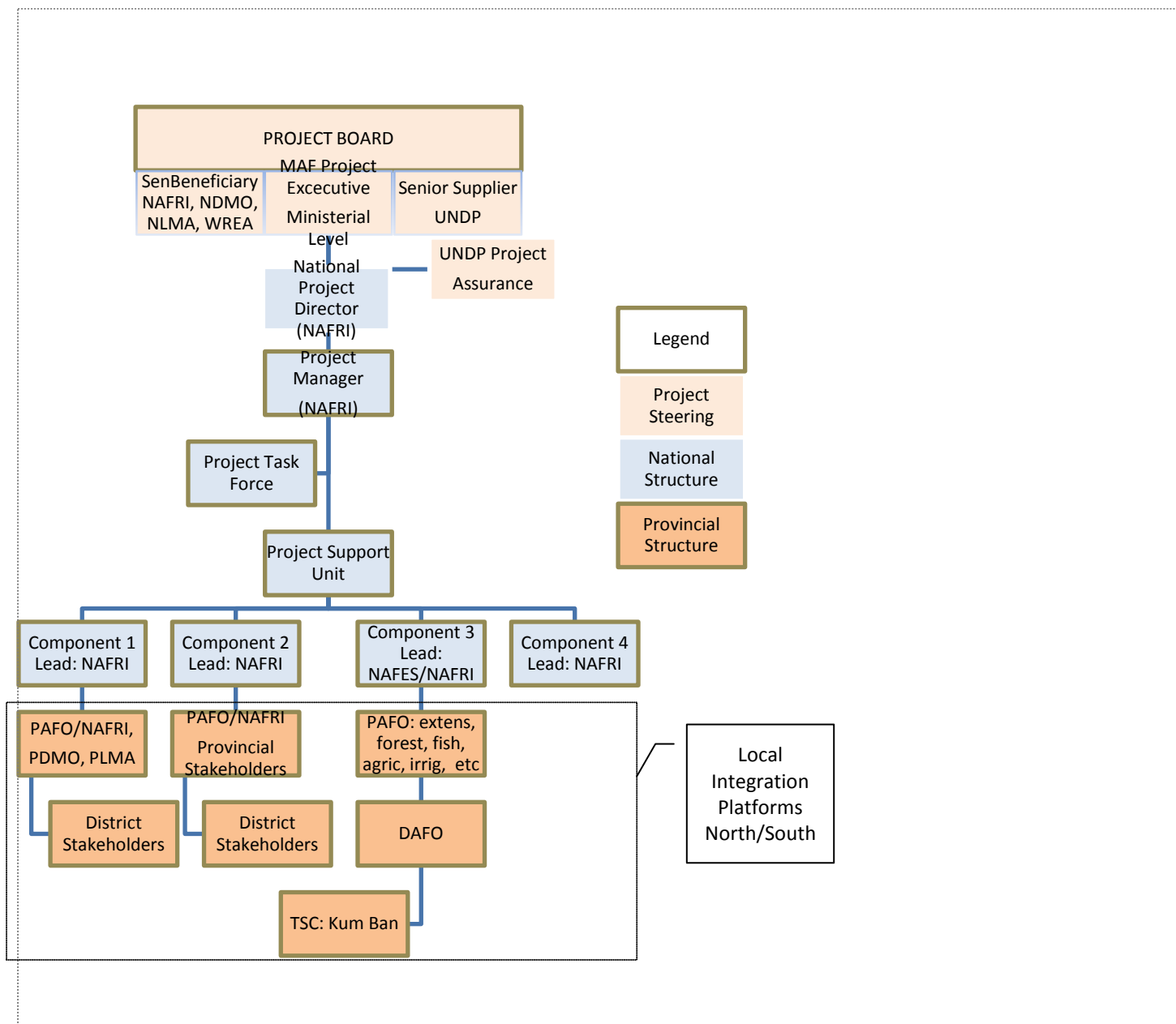
26. The project will recruit a local consultant and deploy several international experts dealing with cost-effectiveness of operations and economic benefits generated. Farming system budgets, farm budgets, household income analysis, cropping budgets, irrigation budgets and other tools will be part of the Climate Change Training and Adaptation Modules (CCTAM).

27. The project should also experience substantial economic advantages through the UNDP Poverty and Environment Initiative (PEI, a parallel co-finance project) and its component on research and analysis on economic valuation of ecosystem services and their trade-offs in development decisions (in collaboration with UNEP/DEPI), as well as research/ analysis of environmental and financial costs and benefits from land use change for development.

### PART III: INSTITUTIONAL COORDINATION AND SUPPORT

#### A. PROJECT IMPLEMENTATION ARRANGEMENT:

##### **28. Project organigram:**



**29. Project executive and implementing partner (GoL):** The project will be implemented under the UNDP National Implementation Modality (NIM), which for GEF corresponds to national execution of the project by the Government of Lao PDR. Specifically, MAF will act as the Project Executive given its formally acknowledged role as lead institution for climate change adaptation of the agricultural sector in Lao PDR. NAFRI has been assigned for GoL/MAF as Implementation Partner in charge for overall implementation of the project (4 components). The project is involving several other departments of MAF, especially NAFES, as well as other institutions (WREA, NLMA, NDMO), and will also include major participation of these, for example through their membership in the Project Board, ongoing support for project management, the provision of technical backstopping, and the participation of their technical staff in activities related to agricultural adaptation to climate change.

**30. Project Board** is responsible for making management decisions for a project in particular when guidance is required by the Project Manager (NAFRI). The Project Board plays a critical role in project monitoring and evaluations by quality assuring these processes and products, and using evaluations for performance improvement, accountability and learning. It ensures that required resources are committed and arbitrates on any conflicts within the project or negotiates a solution to any problems with external bodies. In addition, it approves the appointment and responsibilities of the Project Manager and any delegation of its Project Assurance responsibilities. Based on the approved Annual Work Plan, the Project Board can also consider and approve the quarterly plans (if applicable) and also approve any essential deviations from the original plans.

In order to ensure UNDP's ultimate accountability for the project results, Project Board decisions will be made in accordance to standards that shall ensure management for development results, best value money, fairness, integrity, transparency and effective international competition. In case consensus cannot be reached within the Board, the final decision shall rest with the UNDP Project Manager.

Potential members of the Project Board are reviewed and recommended for approval during the L-PAC meeting. Representatives of other stakeholders can be included in the Board as appropriate. The Board contains three distinct roles, including:

- 1) **An Executive:** individual representing the project ownership to chair the group.
  - *This will be a most senior official from the ministerial level MAF, Lao PDR*
- 2) **Senior Supplier:** individual or group representing the interests of the parties concerned which provide funding for specific cost sharing projects and/or technical expertise to the project. The Senior Supplier's primary function within the Board is to provide guidance regarding the technical feasibility of the project.
  - *This will be a Representative from UNDP*
- 3) **Senior Beneficiary:** individual or group of individuals representing the interests of those who will ultimately benefit from the project. The Senior Beneficiary's primary function within the Board is to ensure the realization of project results from the perspective of project beneficiaries.
  - *These will be the DG of NAFRI (MAF) and representatives from other ministries: WREA, NLMA and NDMO (MLSW)*

**31. The Executive** is ultimately responsible for the project, supported by the Senior Beneficiary and Senior Supplier. The Executive's role is to ensure that the project is focused throughout its life cycle on achieving its objectives and delivering outputs that will contribute to higher level outcomes. The Executive has to ensure that the project gives value for money, ensuring a cost-conscious approach to the project, balancing the demands of beneficiary and supplier.

**32. The Senior Beneficiary** is responsible for validating the needs and for monitoring that the solution will meet those needs within the constraints of the project. The role represents the interests of all those who will benefit from the project, or those for whom the deliverables resulting from activities will achieve specific output targets. The Senior Beneficiary role monitors progress against targets and quality criteria. This role may require more than one person to cover all the beneficiary interests. For the sake of effectiveness the role should not be split between too many people.

**33. The Senior Supplier** represents the interests of the parties which provide funding and/or technical expertise to the project (designing, developing, facilitating, procuring, implementing). The Senior Supplier's primary function within the Board is to provide guidance regarding the technical feasibility of the project. The Senior Supplier role must have the authority to commit or acquire supplier resources required. If necessary, more than one person may be required for this role. Typically, the implementing partner, UNDP and/or donor(s) would be represented under this role.

**34. Project Assurance and Overall responsibility:** Project Assurance is the responsibility of each Project Board member, however the role can be delegated. The Project Assurance role supports the Project Board

by carrying out objective and independent project oversight and monitoring functions. This role ensures appropriate project management milestones are managed and completed.

Project Assurance has to be independent of the Project Manager; therefore the Project Board cannot delegate any of its assurance responsibilities to the Project Manager. A UNDP Programme Officer typically holds the Project Assurance role.

**35. The National Project Director (NPD)** The NPD will be the NAFRI DG responsible for overseeing overall project implementation on regular basis and ensuring that the project objective and outcomes are achieved. This function is not funded through the project. The NPD, assisted by the Project Manager, will report to the Project Board on project progress. The NPD will be responsible for coordinating the flow of results and knowledge from the project to the Project Board.

**36. Project Manager (PM):** The Project Manager will be a senior GoL staff appointed by NAFRI and confirmed by the Project Board. The Project Manager has the authority to run the project on behalf of the Implementing Partner within the constraints laid down by the Board. The Project Manager's prime responsibility is to ensure that the project produces the results specified in the project document, to the required standard of quality and within the specified constraints of time and cost.

The function is not funded by the project. The Project Manager will be supported by an Assistant Project Manager (APM) recruited full-time under a local technical assistance contract.

The PM will be responsible for the day-to-day management, administration, coordination, and technical supervision of project implementation. S/he will provide overall operational management for successful execution and implementation of the programme. S/he will be responsible for financial management and disbursements, with accountability to the government and UNDP. The PM will ensure provision of high-quality expertise and inputs to the project.

In carrying out her/his responsibilities, s/he will advocate and promote the work of adaptation to climate change in Lao PDR and will also closely work and network with the relevant government agencies, UN/UNDP, the private sector, NGOs, and civil society organizations.

Prior to the approval of the project, the **Project Developer** role is the UNDP staff member responsible for project management functions during formulation until the Project Manager from the Implementing Partner is in place.

**37. Project Support:** The Project Support role provides project administration, management and technical support to the Project Manager as required by the needs of the day-to-day operations or by the Project Manager. The project support functions are available through the Project Support Unit (PSU). NAFRI will provide office space for the PSU and the professional staff. The NAFRI will provide the standard logistical services available on the NAFRI compound for the PSU. PSU staff will be funded by the project to ensure delivery of results as specified in the Strategic Results Framework. The PSU will ensure project implementation proceeds smoothly through effective work plans and efficient administrative arrangements that meet donor requirements. To facilitate and assure smooth and quick provision of services and support in the regions, the PSU will set up two small branches, one for the North, one for the South, in the PAFOs of Savannakhet and Xayaboury provinces. The PAFOs will provide office space for these branch PSUs. The PSU will be composed of the following core staff: Assistant Programme Manager, Senior M+E Officer, Senior Finance and Admin Officer, Translator/Interpreter, Administrative Assistant, South: Finance and Admin Officer Savannakhet Finance/Admin Assistant Savannakhet, North: Finance/Admin Officer Xayaboury, Finance/Admin Assistant Xayaboury.

**38. Project Task Force (PTF, a National Technical Working Group):** Given the large number of technical stakeholders from within MAF, and partial implementation of activities through other third parties, as well as complex technical coordination arrangements, the Project Task Force will include technical staff from departments, provinces, districts, groups as required by the actual phase of technical project implementation. The PTF role will provide auxiliary technical support and advice to the Project Manager and



the PMU to ensure smooth collaboration among all technical partners. The PTF will include all potential MAF departments engaged in the implementation of the project, professionals from other departments providing inputs, receiving outputs, or having technical links to some activities. It will include representatives from INGOs (e.g. IUCN, WWF) and Lao PDR mass organizations (e.g. women, youths), and other groups or individuals (e.g. private sector) that may have a specific interest in some activities or outputs. The PTF as a National Technical Working Group will in principle provide a pool of additional expertise that can be utilized by PM and PSU to improve quality of project implementation and enhance meaningful stakeholder engagement on the level of project planning. The meetings of the PTF will be bi-monthly, and the participants will be invited according to the actual phasing of the project (work plan, status of activities), and the technical issues on the agenda. DSA for this purpose has been included in the project budget.

**39. Local Integration Platform (LIP, a Provincial / Sub-provincial Technical Working Group):** The structure and approach of the PTF is replicated on provincial and sub-provincial level through the “Local Integration Platform”, a technical working group of local stakeholder. The integration of activities on local level (province, district, kum ban) is most essential for the success of the project, especially for component 3 (coordinated through NAFES). A LIP Coordinator will be jointly assigned / recruited by NAFRI/NAFES and work through the existing PAFO, DAFO and the Technical Service Centres (TSC). The LIP will provide coordination and guidance to relevant local stakeholders, implementers, beneficiary groups. The meetings of the LIP will be monthly, and the participants will be invited according to the actual phasing of the project on-site (work plan, status of activities), and the technical issues on the agenda. The Governor’s office will be requested to chair the meeting quarterly. There will be one LIP for the North and one LIP for the South. DSA for the LIP has been included in the project budget.

**40. Technical Service Centers (TSC):** The Technical Service Centres are a comparatively new structure of the GoL to deliver administrative and technical services on the Kum Ban level. Kum Bans are comparable to Communes in the local government structure. They are operating in a perceived administrative-operative vacuum between village and district levels. TSCs are supposed to be equipped with agricultural extension staff, which potentially makes them an important pillar for the implementation and long-term sustainability of the project. The project will activate this structure for its own outcomes, at the same time contributing to institutional strengthening of this entity.

**41. Contractors:** The implementation of the components of the project will be supported by contractors, selected according to UNDP procurement rules. The Government Implementing Partner may contract other entities, defined as Responsible Parties, to undertake specific project tasks through a process of competitive bidding. However, if the Responsible Party is another government institution or a United Nations agency, competitive bidding will not be necessary and direct contracting will be applied. Confirmation of direct contracting will need to comply with criteria, such as comparative advantage, timing, budgeting and quality. If direct contracting criteria cannot be met the activity will be open to competitive bidding.

**42. Administrative Implementation Manual:** Based upon UNDP’s Project Operations Manual, further details on project internal functions, processes and procedures will be outlined in an Administrative Implementation Manual to be produced during the inception period, and the first Annual Work Plan and Budget of the project.

#### **PART IV: EXPLAIN THE ALIGNMENT OF PROJECT DESIGN WITH THE ORIGINAL PIF:**

43. No major change in overall strategy, community based approach, component focus was necessary.

44. During the extensive PPG process the project design as outlined in the original PIF was aligned as follows:

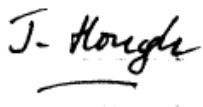
- A stronger emphasis was given to an agro-ecosystem / general ecosystem approach.
- An additional focus on existing or disappearing coping strategies by farmers / farming systems was introduced.

- New considerations related to socio-economic conditions of farmers and micro-economics were introduced.
- The scope of agriculture was extended to include fisheries, small livestock, vegetables, NTF products.
- Off-farm income generation was included as an adaptation option.
- A stronger emphasis on a functional mechanism for early warning was given.
- A stronger emphasis on lessons learned across the GMS regions was given.
- The 4 project components have been more closely interlinked, as far as overall management, monitoring and utilization of outputs is concerned.

45. Subsequently the PIF budget allocations have been modified:

- The LCDF finance for component 1 has been reduced by 48%. This reduction has been more than compensated by the co-finance contribution.
- The LCDF finance for component 2 has been reduced by 20%. This reduction has been more than compensated by the co-finance contribution.
- The LCDF finance for component 3 has been increased by 25%, which is more than 50% of the LCDF contribution. This amount (plus additional co-finance contribution) will assure a very strong focus on operations in the field, and practical adaptation measures on the farm / on the ground.
- The LCDF finance for component 4 has increased slightly and the adaptive learning mechanism across the GMS region has been solidified.

#### PART V: AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with LDCF policies and procedures and meets the LDCF criteria for project endorsement.					
Agency Coordinator, Agency name	Signature	Date	Project Contact Person	Telephone	Email Address
John Hough Officer-In-Charge UNDP/GEF		September 30, 2010	Angus Mackay Regional Technical Advisor	+66/2288/2784	angus.mackay@undp.org

<p><b>This project will contribute to achieving the following Country Programme Outcome as defined in CPAP or CPD: UNDP Laos CPAP 2007-2011</b></p> <ul style="list-style-type: none"> <li>• <b>Outcome 2:</b> Enhanced ownership and capacity for pro-poor planning, implementation and harmonized aid coordination, and disaster management <ul style="list-style-type: none"> <li>○ <i>Output 2.4:</i> Increased capacity within the Government to prepare and respond to natural as well as man-made disasters at all level</li> </ul> </li> </ul>
<p><b>Country Programme Outcome Indicators (UNDP Laos CPAP 2007-2011):</b></p> <ul style="list-style-type: none"> <li>• Capacities on sustainable land management, drought and flood preparedness enhanced through participatory adaptation and monitoring activities in selected provinces.</li> </ul>
<p><b>Primary applicable Key Environment and Sustainable Development Key Result Area (same as that on the cover page):</b></p> <p>3. Promote climate change adaptation</p>
<p><b>Applicable SOF (e.g. GEF) Strategic Objective and Program:</b></p> <p>Least Developed Countries Fund (LDCF) National Adaptation Programmes Of Action (NAPA)</p>
<p><b>Applicable SOF (e.g. GEF) Expected Outcomes:</b> N/A</p>
<p><b>Applicable SOF (e.g. GEF) Outcome Indicators:</b> N/A</p>

	Indicators	Baseline	Targets End of Project	Source of verification	Risks and Assumptions
<b>Project Objective<sup>2</sup></b> Food insecurity resulting from climate change in Lao PDR minimized and vulnerability of farmers to extreme flooding and drought events reduced. <b>(equivalent to output in ATLAS)</b>	<p>Availability of a framework for climate change resilient agriculture in Lao PDR</p> <p>Percentage of households in pilot districts (Savannakhet, Saravan and Xayaboury province) actively implementing climate change adaptation measures introduced by the project</p> <p>Proportion and value (yield) of agricultural assets with increased resilience to climate change as a result of adaptation measures implemented by this project</p>	<p>Climate risk considerations are not integrated into major agricultural sector policies (including the National Agricultural Strategy to 2020); institutional, organizational and individual capacities to understand the link between climate change and future food security need to be strengthened.</p> <p>Current agricultural practices among subsistence farmers are based on historical climatic conditions and trends and are unsuited to increase flooding and drought conditions that are becoming increasingly frequent in Lao PDR.</p> <p>Currently the yield of agricultural land is being affected by climate change related factors leading to reductions in productivity.</p>	<p>By the end of the Project a framework for CC resilient agriculture is available, and being used by the GoL in actively planning for widespread introduction of adaptation measures.</p> <p>By the end of the project 6 Training and Agricultural Adaptation Modules (CCTAMs) have been extended to 75% of target households in 2 pilot districts (Savannakhet/Saravan province, Xayaboury province)</p> <p>By the end of the project interventions on the ground increase agricultural productivity on Climate Change affected land by 25%</p>	<p>Project terminal evaluation report</p> <p>Project surveys and technical assessment reports</p> <p>Survey of productivity (yield) in target areas</p>	<p>Risks: CC Adaption process is driven externally CC manifests as sudden natural disaster</p> <p>Assumptions: Actual climate change lies within a “flexibility range” for adaptive agriculture Tangible socio-economic benefits are generated for the farmer Project is able to attract further co-funding during the implementation period</p>
<b>Outcome 1<sup>3</sup></b> Increased knowledge and understanding of climate variability and climate induced threats on agricultural production, food security and vulnerability, in Lao PDR	<p>1.1. Cover: Number and type of stakeholders served by expanded climate and vulnerability information and knowledge base related to agriculture and food security</p> <p>1.2. Impact: Numbers of national and provincial level stakeholders using improved climate and vulnerability information in formulation of</p>	<p>Basic regional climate change information has been compiled in the NAPA Lao PDR. However this information has not been sufficiently downscaled or applied to the agricultural sector. Vulnerability information is scattered across public and private sector entities, government departments and development agencies.</p> <p>Information is currently not in a form that can be used by national stakeholders in a user-friendly and policy-relevant manner. It is not available in any form to sub-national</p>	<p>All stakeholders identified during PPG and inception phases have access to an efficiently organized and up to date knowledge and information network for climate change impacts on agriculture and food security.</p> <p>By the end of the project 60% of identified national and provincial government stakeholders are using the knowledge base for sector planning:</p>	<p>Survey of identified relevant stakeholders</p> <p>Provision in NAFRI budget</p>	<p>Risks: Complex technical and organizational management of knowledge base</p> <p>Assumptions: Adequate and timely national and international support for sharing and exchange of climate change data, modeling information</p>

<sup>2</sup> Objective (Atlas output) monitored quarterly ERBM and annually in APR/PIR

<sup>3</sup> All outcomes monitored annually in the APR/PIR. It is highly recommended not to have more than 4 outcomes.

<b>(equivalent to activity in ATLAS)</b>	<p>climate resilient policies and plans.</p> <p>1.3. Sustainability: Resources available to maintain knowledge base after end of the project</p>	<p>authorities and key specialists (such as local planners and extension workers) responsible for working with farmers directly.</p> <p>There is no national budget allocation for establishing and maintaining an appropriate knowledge network for climate change information.</p>	<p>strategies, long-term plans, annual plans and budgets, project work plans</p> <p>By the end of the project 50% of cost for operation and maintenance of the knowledge base and information network are included in the sectoral budget allocation for agriculture</p>		<p>and other relevant data and information</p> <p>Systematic coordination between relevant stakeholders</p> <p>GoL Budget available after project end</p>
<b>Outputs supporting Outcome 1:</b> <p>1.1. Existing climate hazard and vulnerability information for Lao PDR compiled and integrated into a agriculture and climate risk information system, coordinated by NAFRI (established under Output 1.4.) leading to a long-term warning system.</p> <p>1.2. Scenarios for agricultural production in Lao PDR assessed on the basis of local expertise, regional and global Climate Change models</p> <p>1.3. Agricultural land-use planning in flood- and drought-prone areas analyzed and alternative land use plans developed, based on climate-risk scenarios and long-term warning indicators</p> <p>1.4. Climate risk projections integrated into a comprehensive national long-term information system for flooding and drought-related hazards and vulnerabilities, and the effects on agriculture, managed and updated by NAFRI</p>					
<b>Outcome 2</b> Capacities of sectoral planners and agricultural producers strengthened to understand and address climate change – related risks and opportunities for local food production and socio-economic conditions <b>(equivalent to activity in ATLAS)</b>	<p>2.1. Cover: Number of targeted institutions (agriculture, water management, food security, early warning, poverty alleviation, etc) with increased capacity to reduce risks of and respond to climate variability.</p> <p>2.2. Impact: Number of targeted agricultural officers, extension workers, farmer cooperatives and TSC (Technical Service Center) members in target districts have an advanced understanding of key climate change risk and impacts on agricultural production and socio-economic conditions.</p>	<p>Capacity gaps at the national and provincial level to access, understand, interpret and apply climate risk information to promote climate resilient agricultural planning and investment decisions are prominent.</p> <p>At the district and village level, farmer cooperatives and Disaster Management Committees lack financial resources and knowledge for resilience decision making in the face of dynamic hydro-meteorological hazards. Poverty reduction strategies and land use planning in Lao PDR give limited consideration to climate variability and change.</p>	<p>By the end of the project at least 4 planners from at least 6 sectors / sub-sectors relevant to agriculture, food security and CC are able to effectively apply climate risk information in annual and multi- year planning exercises and have applied these skills to the review and revision of existing sector / sub-sector strategies.</p> <p>By the end of the project 75% of DAFO, DDMC, TSC staff in target districts have been trained in applying climate risk information and are applying this acquired knowledge in the planning and implementation of their activities.</p>	<p>Project monitoring and technical assessment reports</p> <p>Official documents</p> <p>Peer group review of modules / guidelines</p>	<p>Assumptions:</p> <p>Implementation modalities for national CC strategy are further developed</p> <p>Evolving innovative capacity of NAFRI is providing new ideas and approaches</p>
<b>Outputs supporting Outcome 2:</b> <p>2.1. Relevant stakeholders in MAF, WREA, MPI, LMA, target PAFOs, and other relevant GoL agencies trained to understand Climate Change risks for agricultural production and review policy options for enhanced food security (applied training)</p> <p>2.2. Climate resilient land-use planning integrated into Lao PDR's poverty reduction and agricultural policies &amp; action plans</p> <p>2.3. Agricultural officers, extension workers, farmer cooperatives and TSC (Technical Service Center) members in target districts trained in climate change impacts on agricultural production</p>					

and socio-economic conditions, and potential community-based adaptation options (e.g. agro-forestry, conservation agriculture, replacement of slash and burn practice, etc) 2.4. District Disaster Management Committees in target districts trained in climate risk assessment and potential community-based risk reduction strategies, including periodical ground practice with communities					
<b>Outcome 3</b> Community-based adaptive agricultural practices and off-farm opportunities demonstrated and promoted within suitable agro-ecological systems (equivalent to activity in ATLAS)	<p>3.1. Cover: Number and type of climate risk-reducing farmer level practices identified and trialed to support adaptation of livelihoods and/or resource management.</p> <p>3.2. Cover: % or targeted farming households aware of predicted adverse impacts of climate change and implementing new adaptive practices for agro-ecosystem and landscape management.</p> <p>3.3. Impact: Improvement in farmer yields and water availability due to adaptation measures trialed in more than 50% of targeted communities.</p>	<p>Agricultural practices, extension services and demonstration sites have not yet been adapted to take climate change risks into account. For example changes in tributary peak flows, changing rainfall intensities and prolonged dry spells are not considered.</p> <p>There is a general lack of awareness about community-based approaches to address climate change risks. As there is consistently less diversification in products, smallholder farmers are generally not able to adapt to dynamic changes in the climatic variables that influence their land, water source, crop, health and yield.</p> <p>The majority of farmers rely on subsistence rain-fed rice farming for their daily staple and sale, and on wild meat and aquatic resources for their source of animal protein.</p>	<p>By the end of the project at least 100 practical field-based adaptation interventions (food security, water management, flood and drought control) are trialed in the 5 pilot districts according to accepted technical standards</p> <p>By the end of the project 75% of farming households in 5 pilot districts (3 provinces), equivalent to 13,500 households, have had access to extension services based on 6 Climate Change Training and Agriculture Adaptation Modules (climate resilient cropping, livestock, fisheries and forestry practices, water management etc.)</p> <p>By the end of the project there is a 25% improvement in farmer yields resulting from adaptation measures trialed in target communities in 5 pilot districts.</p>	<p>Project monitoring and technical assessment reports</p> <p>Baseline survey / repeat baseline</p> <p>Beneficiary survey</p> <p>Survey on perception of stakeholders</p>	<p>Risks:</p> <p>Competing market mechanism (contract farming, monoculture, investment + demand) continue to appear more attractive</p> <p>Legal and organizational framework for farmer organizations is inadequate</p> <p>Assumptions:</p> <p>Pilot activities and results are able to influence mainstream debate on agriculture in Lao PDR</p> <p>Successful decentralization of project activities</p> <p>Constructive collaboration with other projects in the target area</p>
<b>Outputs supporting Outcome 3:</b> <p>3.1. Resilient elements in existing farming systems identified and thoroughly strengthened</p> <p>3.2. Supply chains for different climate-resilient crops, livestock, etc., and farming inputs analyzed and economic impacts/market barriers assessed</p> <p>3.3. Climate resilient cropping, livestock, fisheries and forestry practices introduced in at least 1 flood-prone and at least 1 drought-prone area</p> <p>3.4. Diversified agriculture, livestock, fish, vegetables, NTF production, and alternative feasible off-farm activities demonstrated in target districts where farming communities are dependent on rain-fed crops</p> <p>3.5. Rainfall capture, storage and adaptive irrigation and/or drainage management, and small-scale flood protection measures introduced in target drought-prone districts where rainfall is becoming more variable.</p>					
<b>Outcome 4</b> Adaptation	4.1. Replicability: Number of 'lessons learned' codified in a	The current knowledge about successful and unsuccessful climate risk management	A project internal M+E system covering all components and all project locations	Project reports and	<p>Risks:</p> <p>Very diversified</p>

Monitoring and Learning as a long-term process (equivalent to activity in ATLAS)	<p>specific KM facility such as the Adaptation Knowledge Platform for South East Asia or the global Adaptation Learning Mechanism</p> <p>4.2. Replicability: Number and type of relevant networks or communities through which lessons learned are disseminated to enable replication.</p>	<p>approaches in the agricultural sector in Lao PDR is not systematically captured and analyzed.</p> <p>As there is presently no knowledge management mechanism that would allow the systematic capturing and dissemination of lessons learned from different climate change adaptation projects, there is no way for Government, provincial and district authorities, and sector planners to learn from the lessons learned or to scale up successful activities.</p>	<p>systematically provides quantitative and qualitative data and information on coded 'lessons learned' and a website has been established linked to wider dissemination through regional and global networks (ALM, Wiki-adapt, Eldis and the Asia Knowledge Platform)</p> <p>By the end of the project 2 regional conferences on CC+AA are organized by NAFRI for GMS member states (in collaboration with partner organizations) for SE ASIA (UNEP, SID, SEI, UNDP, ADB)</p>	<p>publications</p> <p>Website</p> <p>Conference conclusions</p>	<p>stakeholder groups with wide range of different needs, interests and capacity</p> <p>Complex communication of technical issues, combined with day-to-day experience</p> <p>High-tech process with low impact on ground reality</p> <p>Assumptions:</p> <p>Active engagement of partners, especially MAF and UN</p>
<p><b>Outputs supporting Outcome 4:</b></p> <p>4.1. Project lessons captured in systematic monitoring, and periodically disseminated through, the Adaptation Learning Mechanism (ALM)</p> <p>4.2. Project knowledge shared with other countries in the Greater Mekong Sub-region facing climate-induced drought and flooding hazards to agricultural production through conferences and workshops at NAFRI</p> <p>4.3. Project knowledge incorporated into national flood and drought prevention and agricultural training programmes in Lao PDR</p>					

ANNEX B: RESPONSES TO PROJECT REVIEWS (from GEF Secretariat and GEF Agencies, Responses to Comments from the Convention Secretariat made at PIF)

N/A

ANNEX C: CONSULTANTS TO BE HIRED FOR THE PROJECT

<b>Local Consultants</b>	<b>Main Tasks</b>	<b>Monthly Fee US\$</b>
<b>Assistant PM</b>	<i>Under overall responsibility of PM: responsible for project operations. Acting on behalf of Implementing Partner. Informing PTF regularly and seeking cross-sectoral and cross-ministerial advice. Executing technical programmes through the PMU. Preparation of work plans, budgets, reports. Preparing operational environment for M+E group. Contractor coordination and management.</i>	2,400
<b>Component Coordinator</b>	<i>Responsible for work programme of component. Annual component workplans and budget. Integration with other components. Guiding activities in provinces. Coordination with other project on day-to-day basis. Following up monitoring results and findings related to the component.</i>	1,200 – 1,800
<b>M+E / Reporting Officer</b>	<i>Regular monitoring of all relevant project features in line with the projects monitoring and evaluation framework, and detailed annual monitoring plans for provinces, districts and components. Participatory monitoring tools on community level. Quality reports, quantitative and qualitative data, photos, charts, maps, presentations.</i>	700 – 1,400
<b>Climate Scenario Analyst</b>	<i>Compilation of all existing scenarios associated to Lao PDR. Analyses of existing scenarios, together with other organizations in the country. Development and presentation of specific scenarios for Lao PDR and the agricultural sector. Communication with other national and international CC organizations</i>	900
<b>Policy Development Specialist</b>	<i>Identification of existing laws, strategies, decrees, administrative orders, guideline etc. that could have a bearing on CC issues, especially related to agriculture. Reviews of the texts, suggesting modifications and improvements through the GoL system, with special consideration of the Climate Change office, and based upon the national Strategy for Climate Change.</i>	900
<b>Agro-Economist</b>	<i>Detailed economic analysis of household budgets, farm budgets, farming systems, use of natural resources. Identification of CC adaptation measures which are economically beneficial for the farmers and villagers (micro-level). Identification of suitable crops and species, and other adaptation measures. Eventually proposals for subsidies, if economic benefits through CC adaptation are generated on macro-level only.</i>	900
<b>Agro-Ecologist</b>	<i>Detailed ecological analyses of previous or existing farming systems. Suggestions for farming system adaptations which are in line with the ecological conditions of the area. Identification of suitable crops and</i>	700-900



	<i>species, and other adaptation measures.</i>	
<b>Media/Publication Officer</b>	<i>Based on results of internal project monitoring for all components, contractor reports, own investigation and research high quality material / media will be available for GoL, UNDP, project stakeholders, the interested public, a global audience (ALM). Close linkage of outcome for component 1 to outcome for component 4.</i>	900
	<i>Total person-months: 194</i>	700 – 2,400 (Pending on experience)

<b>Component</b>	<b>International Consultant</b>	<b>Main Tasks</b>	<b>Duration Year</b>
<i>All</i>	<i>Team Leader Resilience of Agriculture Sector to Climate Change (CC)</i>	<ul style="list-style-type: none"> <li>• Support to maintain strategic direction towards AA2CC for all components</li> <li>• Technical inputs for all components</li> <li>• Management of international TA</li> <li>• Support work planning and reporting</li> </ul>	40 person-months over 4 years
<i>C1</i>	<i>Land Use Planning for CC</i>	<i>Guide the production of 2 district land use plans through NLMA with focus on AA2CC</i>	2 person-months early 2011
<i>C1</i>	<i>Early warning systems for agriculture and CC hazards</i>	<i>Streamline existing elements of early warning with NDMO, focus on AA2CC</i>	2 person-months early 2011
<i>C1</i>	<i>CC scenario analysis for Lao PDR</i>	<i>Assist to analyze and develop specific CC scenarios for Lao PDR and train local NAFRI staff on the job</i>	2x2 person-months mid 2011 and 2013
<i>C2</i>	<i>Training Needs Analysis for Agriculture Adaptation to Climate Change (AA2CC)</i>	<i>Analyze AA2CC training needs of staff in MAF, PAFO, DAFO, TSCs, NLMA, NDMO, etc. and prepare training plan</i>	2 person-months early 2011
<i>C2</i>	<i>Institutional development for mainstreaming CC within MAF/GoL</i>	<i>Analyze details for mainstreaming AA2CC issues across institutions and sectors in Lao PDR and initiate support measures through MAF, WREA, others</i>	2 person-months mid 2011
<i>C2</i>	<i>Training in curricula development for AA2CC</i>	<i>Assist to develop curricula for AA2CC training with NAFES officers and develop extension plan</i>	2 person-months mid 2011
<i>C2</i>	<i>Community based agricultural extension for AA2CC</i>	<i>Guide community based agricultural through NAFES extension process with focus on AA2CC through ToT</i>	2 person months early 2011
<i>C3</i>	<i>Farming systems and AA2CC</i>	<i>Analyze existing farming systems and potential for adaptation activities with NAFRI and NAFES, related to</i>	2 person-months mid 2011

<i>Component</i>	<i>International Consultant</i>	<i>Main Tasks</i>	<i>Duration Year</i>
		<i>CC and initiate changes</i>	
<i>C3</i>	<i>Efficient water management and water harvesting</i>	<i>Analyze existing water management and water harvesting practice with MAF and WREA, and initiate technical improvements in the light of CC effects</i>	<i>2 person-months mid 2011</i>
<i>C3</i>	<i>Supply chains for agricultural inputs in support to agriculture adaptation</i>	<i>Analyze existing supply chains for agricultural inputs with MAF/NAFRI, others, and initiate commercial routing of adequate inputs to Lao PDR</i>	<i>1 person-month early 2011</i>
<i>C3</i>	<i>Effective management of farmer organizations</i>	<i>Analyze status of farmer organizations with PAFO/DAFO in target districts and initiate organizational improvements</i>	<i>1 person-month late 2011</i>
<i>C3</i>	<i>Unallocated (available for specific technical matters)</i>	<i>Pending on unforeseen needs</i>	<i>2 person-months as required</i>
<i>C4</i>	<i>WWW/ALM products development</i>	<i>Assist NAFRI to produce creative and powerful learning tools</i>	<i>1 person-months mid 2012</i>
<i>C1-4</i>	<i>Monitoring Systems Specialist</i>	<i>Establish and review a project internal monitoring system for effectiveness, efficiency, and quality control</i>	<i>2 x 2 person-months</i>
		<i>Total person months Rates \$ 9,900 / 15,000 per month pending on seniority / experience</i>	<i>70</i>

#### ANNEX D: STATUS OF IMPLEMENTATION OF PROJECT PREPARATION ACTIVITIES AND THE USE OF FUNDS

##### A. EXPLAIN IF THE PPG OBJECTIVE HAS BEEN ACHIEVED THROUGH THE PPG ACTIVITIES UNDERTAKEN.

The main objective of the PPG has been met in that a robust CEO endorsement document and UNDP project document have been developed. The project baseline and the adaptation alternative have been clearly identified. Project formulation was conducted in a highly participatory and consultative manner through a number of workshops (see annex 2 of UNDP Project Document) including: an Inception Workshop (Vientiane, 25/03/2010), a Regional Consultation Workshop in the South (Savannakhet Province, 28-29/04/2010), a National Planning Workshop (Vientiane, 18-19/05/2010) and a Regional Consultation Workshop in the North (Xayaboury Province, 17-18/06/2010). Both Regional Consultation Workshops were followed by field visits to the proposed target districts, during which additional data was collected and verified. Key government stakeholders, who will be involved in project implementation, attended 2 short Climate Change adaptation related trainings organized by the UNDP and UNEP Regional Offices in Bangkok. Additional capacity assessments (financial management capacity, management capacity and technical capacity) of the main implementing partner (MAF) will be conducted during the coming months and identified gaps will be addressed during further project planning (project inception workshop). Specifically, the PPG has completed the following activities and outputs:

Activities	Outputs	Status
<b>1. Technical Definition and Capacity Needs Assessment</b>	1.1. Project baseline defined, including detailed analysis of agricultural and disaster management policies and strategies 1.2. Current and projected climate change risks in Lao PDR defined 1.3. Specific sites for project intervention defined 1.4. Adaptation alternative assessed and summarized in an additional cost matrix 1.5. Project is integrated with Government priorities in the agriculture sector, climate change strategy, development and disaster risk reduction plans and policies 1.6. Project integrated with complementary projects	<b>Completed</b> (additional HACT micro-assessment and Capacity Assessment of IP partner for UNDP NIM projects will be conducted)
<b>2: Institutional arrangements, Monitoring and Evaluation</b>	2.1. Strategic Results Framework including verifiable results indicators formulated 2.2. Monitoring and evaluation provisions and reporting arrangements formulated 2.3. Project implementation and execution arrangements, roles and responsibilities defined 2.4. Project sustainability strategy defined (including plans for project replication, upscaling and knowledge management)	<b>Completed</b>
<b>3. Stakeholder Consultations</b>	3.1. Project stakeholders mobilized and engaged in project definition 3.2. Project partnerships and stakeholder setup defined	<b>Completed</b> (Consultations down to district level stakeholders)
<b>4. Financial planning and co-financing definition</b>	4.1. Government negotiations and consultations on project-related issues facilitated 4.2. Multilateral and bilateral co-funding opportunities explored 4.3. Project budget defined 4.4. Official endorsement and co-financing letters prepared	<b>Completed</b>

**B. DESCRIBE FINDINGS THAT MIGHT AFFECT THE PROJECT DESIGN OR ANY CONCERNS ON PROJECT IMPLEMENTATION, IF ANY.**

Findings during the PPG stage have been incorporated into the design of the project; most risks and assumptions are therefore taken into account in the project strategy. Well targeted and defined changes (see Part IV) have been made to project design as a result of the feedback from stakeholder consultations during the PPG phase.

**C. PROVIDE DETAILED FUNDING AMOUNT OF THE PPG ACTIVITIES AND THEIR IMPLEMENTATION STATUS IN THE TABLE BELOW:**

<i>Project Preparation Activities Approved</i>	<i>PPG Amount Approved</i>	<i>Amount Spent To-date</i>	<i>Amount Committed</i>	<i>Uncommitted PPG Amount*</i>	<i>Co-financing amount</i>
International Consultant	42,000	9,100	36,400	0	24,000
Local Consultants	16,100	7,859	8,250	0	5,300
Travel	17,100	11,828	6,935	0	20,000
Workshops	24,800	26,731	0	0	30,700
Stakeholders inputs					20,000
<b>Total</b>	100,000	55,518	51,585	0	100,000

\* Uncommitted amount should be returned to the LDCF Trust Fund. Please indicate expected date of refund transaction to Trustee.