PROJECT IDENTIFICATION FORM (PIF) [1]

PROJECT TYPE: Full-sized Project
TYPE OF TRUST FUND: GEF Trust Fund

PART I: PROJECT IDENTIFICATION

Project Title:	Collaborative Management for Watershed and Ecosystem Service Protection and Rehabilitation in the Cardamom Mountains, Upper Prek Thnot River Basin.		
Country(ies):	Cambodia	GEF Project ID:[2]	
GEF Agency(ies):	AsDB (select) (select)	GEF Agency Project ID:	Project 40253- 03; Loan 0241
Other Executing Partner(s):	Ministry of Agriculture, Forestry and Fisheries (MAFF)	Submission Date:	2012-04-09
GEF Focal Area (s):	Land Degradation	Project Duration (Months)	36
Name of parent program (if applicable): • For SFM/REDD+ ☐	Greater Mekong Subregion Forests and Biodiversity Program (GMS-FBP). GEF ID: 4649	Agency Fee ($):	99,083

A. FOCAL AREA STRATEGY FRAMEWORK[3]:

Focal Area Objectives	Expected FA Outcomes	Expected FA Outputs	Trust Fund	Indicative Grant Amount ($)	Indicative Co-financing ($)
(select) LD-1	Outcome 1.3: Sustained flow of services in agro-ecosystems (Component 1)	Output 1.3 Suitable SL/WM interventions to increase vegetative cover in agro-ecosystems.	GEFTF	400,000	4,400,000
(select) LD-2	Outcome 2.3 Sustained flow of services in forest ecosystems in drylands (Component 2)	Output 2.2 Types of innovative SFM practices introduced at the field level. Output 2.3 Suitable SFM interventions to increase/maintain natural forest cover in dryland production landscapes.	GEFTF	315,484	4,350,000
(select) LD-3	Outcome 3.2 Integrated landscape management practices adopted by local communities. (Component 3)	Output 3.2 INRM tools and methodologies developed and tested. Output 3.4 Information on INRM technologies and good practice guidelines disseminated.	GEFTF	286,350	3,920,000
(select) (select)			GEFTF	0	0
(select) (select)			(select)		
(select) (select)			(select)		
(select) (select)			(select)		
(select) (select)			(select)		
(select) (select)			(select)		
(select) (select)	Others		(select)		
		Sub-Total		1,001,834	12,670,000
		Project Management Cost[4]	GEFTF	**99,083**	630,000
		Total Project Cost		1,100,917	13,300,000

B. PROJECT FRAMEWORK

[1] It is very important to consult the PIF preparation guidelines when completing this template.
[2] Project ID number will be assigned by GEFSEC.
[3] Refer to the reference attached on the Focal Area Results Framework when filling up the table in item A.
[4] GEF will finance management cost that is solely linked to GEF financing of the project. PMC should be charged proportionately to focal areas based on focal area project grant amount.

Project Objective: To restore and maintain forest cover and watershed stability functions while providing for sustainable livelihoods and ecosystem services in the Upper Prek Thnot Watershed.						
Project Component	**Grant Type**	**Expected Outcomes**	**Expected Outputs**	**Trust Fund**	**Indicative Grant Amount ($)**	**Indicative Cofinancing ($)**
Component 1: Improved on –farm soil and water management practices in middle to upper watershed areas. (LD-1)	TA	Outcome 1.1 Enhanced on-farm per ha productivity. Outcome 1.2 Reduced erosion and improved water and soil retention on 3,093 hectares agricultural land. Outcome 1.3 SL/WM and SFM models adopted as good practice for agroforestry and agribusiness models including ELCs.	Output 1. Good practice Sustainable Land and Water Management (SL/WM) interventions piloted with 2,720 households in agricultural production areas. (GEF). Output 2. Pilot demonstration of site-stable agroforestry in three (3) Upper Basin districts (models emphasize crop diversity, meet subsistence, NTFP needs, balance ecological and socio-econ. criterion). (ADB-BCC; GEF). Output 3. Conservation and sustainable integrated watershed and farming models and guidelines applied to 25,000 Economic land concession (ELC) hectares. (ADB-BCC; GEF).	GEFTF	140,000	2,000,000
	Inv	(as above)	(as above)	GEFTF	260,000	2,400,000
Component 2: Integrated agro-forest and forest ecosystem restoration on Prek Thnot watershed prioritized steep slope areas. (LD-2)	TA		Output 4. Pilot demonstration of improved forest canopy and vegetative cover in three (3) districts on steep sloping public lands (e.g. commune, district land; communal farm; forest reserve and/or wildlife sanctuary TBD). (ADB-BCC; GEF). Output 5. 1,000 ha. of forestland under assisted natural regeneration (ADB-BCC; GEF)	GEFTF	140,484	2,000,000
	Inv	(as above)	(as above)	GEFTF	175,000	2,350,000
3. Improved stakeholder capacities for watershed management and monitoring (LD-3).	TA	Outcome 3.1 Watershed management authority with provincial and district participation and local stakeholder capacities	Output 6. Collaborative watershed management authority established for Kampong Speu Province. Output 7. Mechanisms	GEFTF	286,350	3,920,000

		strengthened for upper micro-watershed management.	established for increased stakeholder participation in watershed rehabilitation and management (e.g. involving local stakeholder groups including community watershed committees, farmer groups, businesses). (ADB CEP-BCI; GEF). Outcome 8. Guidelines, training and tools for assessing landscape level ecosystem stablility, resilience and maintenance of regulating services developed. (ADB CEP-BCI; GEF).			
		Outcome 3.2 Appropriate policy and regulatory instruments supporting integrated watershed management and monitoring established.	Output 9. Draft Landuse Law and other regulatory instruments supporting SLM and UNCCD implementation submitted for approval to CAM Govt. and linked to output 3. (GEF; ADB CEP-BCI) Output 10. Development of improved methods for multi-scale assessment and monitoring of land degradation trends, and for impact monitoring of GEF investment in SLM. (ADB CEP-BCI; GEF)			
	(select)			(select)		
	(select)			(select)		
	(select)			(select)		
	(select)			(select)		
	(select)			(select)		
			Sub-Total		1,001,834	12,670,000
			Project Management Cost[5]	(select)	99,083	630,000
			Total Project Costs		1,100,917	13,300,000

C. INDICATIVE CO-FINANCING FOR THE PROJECT BY SOURCE AND BY NAME IF AVAILABLE, ($)

Sources of Cofinancing	Name of Cofinancier	Type of Cofinancing	Amount ($)
National Government	Royal Cambodian Governement	In-kind	300,000
GEF Agency	AsDB (BCC)	Grant	10,000,000
GEF Agency	AsDB (CEP-BCI II)	Grant	3,000,000
(select)		(select)	

[5] Same as footnote #3.

(select)		(select)	
(select)		(select)	
(select)		(select)	
(select)		(select)	
(select)		(select)	
(select)		(select)	
Total Cofinancing			13,300,000

D. GEF/LDCF/SCCF/NPIF RESOURCES REQUESTED BY AGENCY, FOCAL AREA AND COUNTRY[1]

GEF Agency	Type of Trust Fund	Focal Area	Country Name/Global	Grant Amount (a)	Agency Fee (b)[2]	Total c=a+b
AsDB	GEFTF	Land Degradation	Cambodia	1,100,917	99,083	1,200,000
(select)	(select)	(select)		0		0
(select)	(select)	(select)		0		0
(select)	(select)	(select)				0
(select)	(select)(select)	(select)				0
(select)	(select)(select)	(select)				0
(select)	(select)(select)	(select)				0
(select)	(select)(select)	(select)				0
(select)	(select)(select)	(select)				0
(select)	(select)(select)	(select)				0
Total Grant Resources				1,100,917	99,083	1,200,000

[1] In case of a single focal area, single country, single GEF Agency project, and single trust fund project, no need to provide information for this table

[2] Please indicate fees related to this project.

PART II: PROJECT JUSTIFICATION

A. DESCRIPTION OF THE CONSISTENCY OF THE PROJECT WITH:

A.1.1 the GEF focal area/LDCF/SCCF strategies /NPIF Initiative:

The Project "*Collaborative Management for Watershed and Ecosystem Service Protection and Rehabilitation in the Cardamom Mountains, Upper Prek Thnot River Basin*" will contribute directly to the GEF focal area: **Land Degradation (LD1, 2 and 3).**

Project components are designed to reduce pressures on upland forests and natural resources from competing land uses in the wider landscape by demonstrating collborative management and rehabilitation of both private and public lands, agricultural production and forest areas within the Prek Thnot watershed. The project addresseses important national (and global) environment goals to develop multiple benefits from integrated management of landscape mosaics, and mixed agricultural and forest ecosystems; specifically, the GEF project will promote sustainable land management and stabilize watershed catchment functions in Cambodian NAP high-priority land degradation areas.

Upper and mid-basin land and natural resource degradation has significantly distressed the critical Prek Thnot watershed, with far ranging local-regional impacts on agricultural production regimens, ecological services including hydrological flows, poverty alleviation, forest integrity, biodiversirty loss, climate resilience and other tangible environment and socio-economic consequences.

To reduce vulnerabilities to land and livelihoods from land degradation, specific Prek Thnot watershed priorities are targeted in an effective and practical way via components addressing NAP priorities and: i) enhanced on-farm productivity (e.g. improved on-farm soil and water conservation practices on small farms, conservation farming models in land concession areas); ii) the restoration of forest canopy and vegetative cover on priority public lands with degraded steep slope areas, and; iii) improved enabling frameworks (e.g. Landuse Law and regulatory framework supporting SLM) and building of stakeholder capacities to implement and monitor collaborative LD mitigation efforts (e.g. collaborative watershed management units with SLM guidance, training and assessment tools).

An overview of primary linkages between the project and the GEF focal areas is summarized in the following table.

Table 1: Key relationships with GEF Focal Areas

GEF-5 Focal Area Priorities	***Expected Focal Area Outcome***	***Relationship to Project Component***
LD-1	*Outcome 1.3: Sustained flows of services in agro-ecosystems.*	*Component 1: Improved management and integrated approaches sustainably enhancing the productivity and functionality of agro-ecosystems in mid-upper watershed areas.*
LD-2	*Outcome 2.3:Sustained flows of services in forest ecosystems in drylands.*	*Component 2: Sustainable management of forests and reforestation to improve forest cover and sustain flows of forest ecosystem services.*
LD-3	*Outcome 3.2: Integrated landscape management practices adopted by local communities.*	*Component 3: Cross sector harmonization and multi-integration of SLM to reduce pressures from competing landusers in the wider landscape.*

A.1.2. For projects funded from LDCF/SCCF: the LDCF/SCCF eligibility criteria and priorities:

N/A

A.1.3 For projects funded from NPIF, relevant eligibility criteria and priorities of the Fund:

N/A

A.2. National strategies and plans or reports and assessments under relevant conventions, if applicable, i.e. NAPAS, NAPs, NBSAPs, national communications, TNAs, NIPs, PRSPs, NPFE, etc.:

The recent draft ***National Action Program to Combat Land Degradation*** (Cambodia UNCCD NAP, *2011-2020*) was developed with support from GEF, UNEP and the Global Mechanism. It provides analysis of the local degradation circumstances (*Part 1*) and specific objectives, targets and programs (*Action Plan*), including a proposed three phase ($US 22M) set of projects and activities. Two main themes are highlighted within the NAP, namely i) soil conservation and improvement, and ii) restoration of forest ecological services. The key thematic priorities focus on a) watershed management and b) soil fertility as means for addressing land degradation concerns. The NAP also includes an Integrated Financial Strategy (*IFS*) to guide the funding of the NAP implementation.

The Project is closely aligned with the NAP to assist on-ground piloting of Sustainable Land Management (SLM) strategic objectives (SOs), addressing both priority areas and themes identified within the country's NAP. In particular, this Project supports:

i) Identification and adoption of appropriate on – farm soil management and related practices;
ii) Restoration of watershed and forest ecological services that improve and sustain agricultural productivity;
iii) Supportive policy frameworks to encourage widespread application of Sustainable Land Management (SLM), and;
iv) Strengthening human resource capacities to plan and implement programs for SLM.

GEF Project activities sustaining agricultural productivity, forest ecosystem integrity and contributing SLM inputs to sustainable livelihoods are also consistent with the ***National Strategic Development Plan*** (*2009-2013*), and its "Rectangular Strategy" with *good governance* at the center developing favorable enabling conditions for i) private sector development and employment creation; ii) capacity building and human resource development; iii) maintenance and development of infrastructure; and iv) enhancement of the agriculture sector, including proposed forestry reforms and improved agriculture productivity and diversification.

The Project is also aligned with the ***Strategy for Water and Agriculture*** (*2009-13*) and activities which aim to i) strengthen institutional capacity and management for agriculture and water sectors, ii) and improve local community food security, iii) agriculture and agri-business value chains, iv) the sustainable management of water resources, irrigation and land management, and (v) agricultural and water research, education and extension.

The GEF Project will also link to proposed Cambodian *National Agro-Ecosystem Guidelines*, poverty reduction and decentralization and deconcentration policies and strategies, and will build off lessons learned and best practice guidelines developed under the *UNDP/GEF SLM project* (*2008-2011*) to enhance forest-based livelihoods development and related sustainable land management.

The Cambodian ***National Adaptation Programme of Action to Climate Change*** (NAPA, 2006) identified a series of "no-regrets" adaptation options that involve: capacity building/training (ii) awareness raising/education, and (iii) infrastructure development. In the framework of co-financing from the ADB supported Biodiversity Conservation Corridors Investment Program (ADB-BCC) in Koh Kong province, the Project will be linked to implementation of the *Pilot Programme for Climate Resilience (PPCR)* where there are clear complementarities, and; direct infrastructure design interventions planned under an ADB Project Preparation Technical Assistance (PPTA) package. This will link with Cambodian Ministry of Environment (MOE), Ministry of Agriculture, Forests and Fisheries (MAFF) and other government departments supporting Cambodian PPCR. The NAPA includes projects associated with reforestation/forest rehabilitation, biodiversity and forest and ecosystem climate resilience, including:

Awareness Raising and Education in Climate Change Issues; Vegetation Planting for Flood and Windstorm Protection; Improving Farmers' Adaptive Capacity to Climate Change; Community Agro-Forestry in Deforested Watersheds; Rehabilitation of Upper Mekong Provincial Waterways; Promotion of Household Integrated Farming and Community Based Agricultural Soil Conservation, etc.

The GEF Project is consistent with and supports the Cambodian NAPA, and in conjunction with ADB-Biodiversity Corridor Project baseline (ADB-BCC, $20M ADB grant; 2010-2018) and the ADB Regional Core Environment Program-Biodiversity Conservation Initiative (ADB CEP-BCI, $15M; 2012-2016) will reinforce integrated landscape and ecosystem management issues and their integration with linked co-benefits in biodiversity, climate change mitigation (deforestation and degradation avoidance), adaptation and sustainable forest management. In this regard, the GEF Project's SLM focus to combat land degradation compliments the national biodiversity goals of the country, supports national and sub-national objectives regarding upstream integrated landscape planning, as well as ecosystem service and protected area conservation management underscored within Cambodian ***National Biodiversity Strategy and Action Plan*** *(NBSAP, 2002)* and the preparation of the ***Fifth National Communications under the Convention on Biological Diversity (CBD)***. The updated cross-provincial landscape forest profiles, integrated landscape and ecosystem approach, and endangered species technical information (via the ADB-BCC, CEP BCI projects) will also contribute toward revisions in the national NBSAP.

The Project supports Cambodia's *National Forest Plan* implementation and is consistent with the Cambodian ***National Forest Policy*** *(1998),* which emphasizes sustainability and practices balancing harvesting with tree planting and forest growth while controlling illegal logging. These practices include: native forest reforestation and fuelwood production; controlling timber-processing capacity, and encouraging modernization of wood processing equipment and employment generation. To note, provisions were made for reviewing the legality of Cambodian forest concessions in 2002, with cancelled concessions reclaimed and classified as 'protected areas'. The Department of Forest and Wildlife was organized into the Forest Administration in 2003, and a single line of authority for forestry developed at the national level. Given the typically large size of Economic Land Concessions (ELC[6]), their ongoing and potential impacts on communities and on landscape connectivitiy and integrity, ELCs will be important to work with in the Project area. A ***community forestry decree*** was implemented in 2003 resulting in 274 community forest areas being identified in 2005 (Rotha 2009). The Project is generally in accord with the 'collaborative management approach' promoted by the decree.

B. PROJECT OVERVIEW:

B.1. Describe the baseline project and the problem that it seeks to address:

Land degradation is a serious concern in Cambodia with profound implications on the nation's development; household, community, and vulnerable groups' food security and livelihoods; national poverty reduction plans and sub-national agricultural development goals; forest encroachment and biodiversity loss, and; climate resiliency of regional forests and maintenance of watershed ecological services.

Agriculture accounts for 30% of Cambodia's GDP, and employs more than 62% of the workforce. Women make up more than half of all rural workers and are responsible for 80% of food production, yet they are often landless with fewer opportunities to access agricultural support services. Low rural productivity and rural poverty are linked to land use changes, governance issues, poor land use management and planning, unsustainable crop production techniques, poor soils, water harvesting limitations and natural resource over exploitation. Notably, the expansion of low-productivity agricultural areas, mono-culture plantation areas, illegal logging, forest concessions (which have not met land, climate and plant requirements needed to develop productive and sustainable agribusiness) and forest land occupancy have led to the dissappearance of native forests and to emergent land degradation trends which threaten national and GMS watershed ecological service flows.

[6] Economic Land Concessions were formalized under the 2001 Land Law and allow long-term lease (70-90 years) to a beneficiary to clear land of up to 10,000 ha. for various agro-industrial activities, including large scale plantations, livestock raising and building factories related to agriculture. There are well-documented community and environment concerns related to ELCs requiring improvements that the Project, via MAFF, will attempt to address.

In terms of food security, Project area small-holder farming households typically only produce enough food from crop production to meet a part of their staple food needs. Most food crop production in western parts of Kampong Speu Province (primary project focal area) are rain-fed, with 93% of households producing a crop in the wet season (compared to only 6% of households in the dry season). Clearly contributing to shortages in food availability, most dry season cropping is restricted to a limited number of communities within the province, i.e. those with access to groundwater, flood recession areas, or surface water[7].

Many households in Project districts of Aural and Phnum Sruoch (Kampong Speu) and Thmar Bang (Koh Kong) concentrate on rice production, producing only limited vegetables and fruit, with many households dependent on forests for foodstuffs and household products. While there is limited data on agricultural tree and perennial crops in the Project area, 'non-rice crop production is undertaken on only small areas of land.'[8]

Due to reduced forest canopy and vegetative cover, Upper Prek Thnot Basin soils have been seriously degraded both in terms of quality and productivity. Upland deforestation and degradation along with climate change has exacerbated the intensity of both floods and droughts[9], which threaten agricultural productivity and food security. Depleted soils and declines in the resiliency of native forest impacts wider landscape stability, the sustainability of agriculture, and thereby local livelihoods and the well-being of communities.

The recent designation of new Economic Land Concessions (ELCs) to agri-business, such as in the Phnom Aural Wildlife Sanctuary (where in mid-2011, six additional ELCs were granted, totaling 46,000 hectares in protected areas,) also present major opportunities and threats in the Project area, and dependent on their management, stand to impact either positively or negatively sub-region natural resource and landscape management and local community access to forests for livelihood needs. Economic land concessions in Cambodia involve very large tracts of land (up to 10,000 ha) entailing long-term leases (i.e. 70 years with right to extension). The objectives of ELC schemes are to 'increase employment in rural areas, generate state revenue and develop Cambodia's agricultural sector'[10] from which State income can be generated via land rental, charges and taxes.[11] Land and Forestry Laws and regulations provide a general framework for ELCs and administrative rules, nevertheless ELCs are known to impact both protected areas and local communities by reducing access to both forest resource and forestland.[12] Given ELC large land holdings and the potential scale of impacts on the sustainability of the watershed, the project will identify and target work with select ELCs to develop SLM/SFM guidance on effective land use, natural resource management, and collaborative management upholding the environment, economic, social and cultural criteria with rural communities in the Project area.

Priorities within Cambodian NAP

Cambodia has recently prepared a National Action Plan (NAP) to Combat Land Desertification and Degradation under UNCDD. The NAP determined that land degradation and low resilience to the effects of climate change now affect key portions of agricultural landscapes and compound issues related to fragmentation of forests. Two immediate causes of the problem were highlighted in the NAP:

> *i) Low farm level soil fertility* is a product of two factors. First, up to 70% of Cambodia soils including rice growing have either medium to low soil fertility. Soils in large areas tend to have low organic matter and low soil moisture retention, limiting the cropping periods. Second, agricultural practices by small farmers as well as plantation operations in upland and hilly slopes cause major soil erosion problems.
>
> *ii) Reduced ecological services to agriculture due to the reduced forest cover* is evident in agricultural landscapes that are affected by high sedimentation and a vicious cycle of floods or drought. In these areas, the natural regulating systems such as forest and vegetative cover in watersheds have been reduced and are thus

[7] World Food Program, Food Security Atlas: http://www.foodsecurityatlas.org/khm/country/provincial-Profile/Kampong-Speu. 2011.
[8] Ibid.
[9] Dr. Sovuthy Pheav. 'Land Degradation Assessment in Cambodia'. Cambodian Department of Agricultural Land and Resource Management.
[10] 2007, RCG Ministry of Agriculture, Forestry and Fisheries.
[11] NGO Forum Cambodia, Environment Forum Core Team. 'Fast-wood Plantations, Economic Concessions and Local Livelihoods in Cambodia.' 2005
[12] Yeang, Donal. Thesis: "Tenure Rights and Benefit Sharing Arrangements for REDD: A Case Study of Two REDD Pilot Projects in Cambodia." 2010.

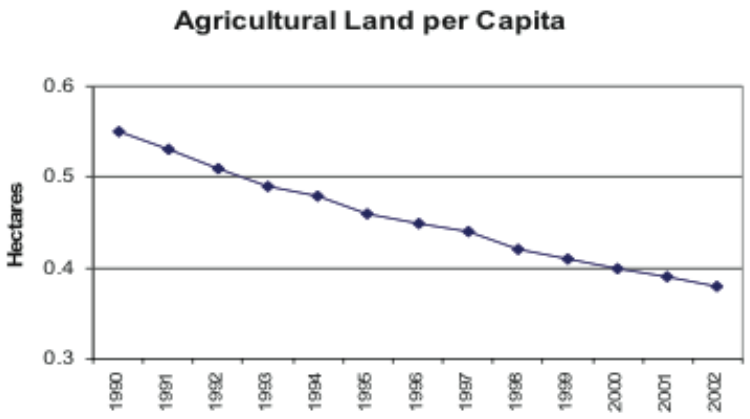
unable to effectively control water runoff and promote water retention. Existing information indicates that 43 % of the total land area are either moderately to highly vulnerable to soil erosion. The decline of tree cover appears to have affected rainfall intensity and temperature on a regional scale.

Deforestation (at 0.5 % per annum) reduces the productive capacity of Cambodian forest ecosystem services and agro-ecological flows, impacting water quality and its availability for agriculture. As evident in Cambodian forest biodiversity profile trends, the *quality* and diversity of natural forests has also continued to be degraded. Reasons for deforestation include a largely unregulated demand for trees and fuel wood, with reforestation and forest restoration efforts yet to catch-up nor match the loss of natural ecosystem diversity or functionality.

Soil erosion and the loss of soil fertility are also brought about by a growing population and low awareness and support services in governement institutions involved in extention and land planning. The ratio of extension workers to farmers in the Project area is low.

Degradation currently impacts approximately 43% of land in Cambodia (or ca. 7.7 million hectares) and poor rural households suffer most from diminishing returns to labour due to degradation. Poor rural households in the Project area are also the most dependent on the natural resource base for their well-being, and have played a part in land degradation by encroaching into protected forest lands, often as the result of their marginalization, lack of tenure and due to the inadequate enforcement of land regulations. Small farmers and communities who lack tenure security are also less inclined to make long term investments in sustainable land management.

About 40-50% of the population own land less than 0.5 ha per household (10% of total agricultural land), which is subject to further fragmentation and eventual over-exploitation[13]. Due to rural population growth, the table below demonstrates that agricultural land per capita has decreased significantly (from 0.55 ha in 1990 to 0.38 ha in 2002)[14]. See figure, below.



Source: FAOSTAT July 2004-Population Database

An increasing demand for agricultural productivity has also led to increased applications of inorganic fertilizers to replace nutrients lost within depleted forest soils and/or within previous crop cycles. Inappropriate fertilization practices causes soil acidification and further exacerbates the inherent low soil fertility situation.

A previous lack of clarity and concern regarding the precise nature of Phrom Thnot upper basin forest hydrological functions, particularly in relation to flooding and droughts, brought uncertainty to forest protection and watershed management.[15] The science-based evidence, issues and threats have become increasingly clear, as well as the critical need for more sustainable land use, access to natural resources, and the need for forest conservation for reducing rural poverty and sustaining economic growth. With project support for SLM capacity and collaborative management, landscape stakeholders (including vulnerable groups of poor women) will be provided proven tools and technologies, guidelines and information on the actual nature, scope and and costs of land degradation, that SLM may be

[13] Ministry of Environment, Cambodia. 'UNEP Cambodia Environment Outlook.' 2009.
[14] Ibid.
[15] Calder, Ian et. al. 'Towards a new understanding of forests and water.' FAO. 2007.

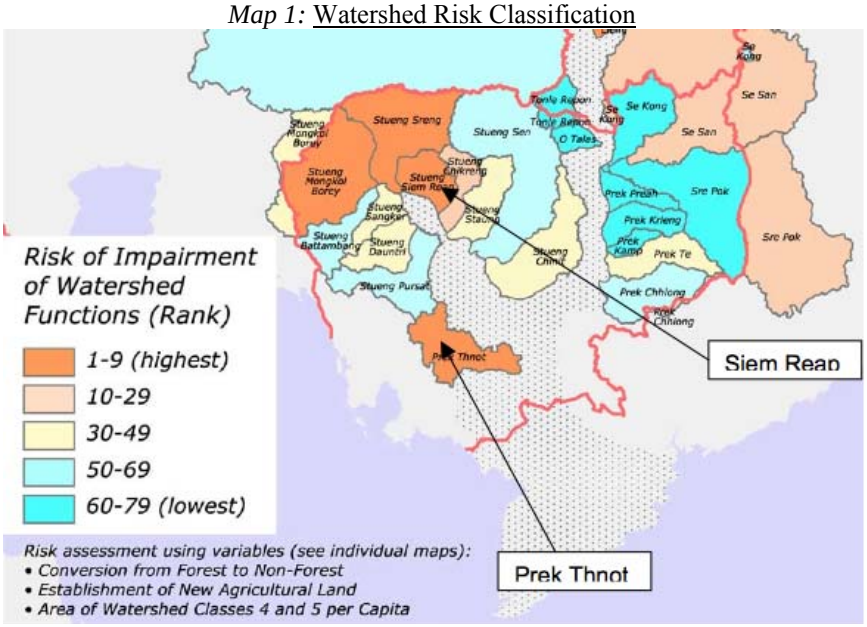
incorporated into landscape and watershed decision making and placed as priority within district, provincial and national public investment programs.

Project Area: The Prek Thnot Watershed
Located primarily in Kampong Speu province but with its headwaters in Koh Kong province uplands, one of the nation's priority watersheds is the *Prek Thnot watershed*. The Prek Thnot River originates from the Cardamom mountains in the southwest area of Cambodia and joins the Basac River, a tributary of the Mekong River, in the southern area of the capital city of Phnom Penh. The total length of the river is 280 km and the drainage area is 5,050 km2. The area receives about 1,500 mm of rain per year and the average runoff is estimated to be 6,042 m3/s. The longitudinal gradient of the river ranges from 1/2,500 to 1/3,000 from the middle to downstream. The river basin includes portions of Koh Kong as part of its headwaters and most areas of Kampong Speu Province, part of Takeo and Kandal Provinces and Phnom Penh Municipality at the downstream.

The Prek Thnot displays high vulnerability to land and water management issues. As mentioned above, the watershed is known to face problems related to: i) continual logging (including fuel wood production) in the Aural Wildlife Sanctuary, Cardamom Protected Forest and associated highlands of the watershed; ii) drought and flooding events in the lowlands; iii) sedimentation of irrigation canals; iv) low to medium soil fertility, and iv) poor soil management practices on both small holder farms and within Economic Land Concession areas.

In a 2004 MRC-GTZ survey, the Prek Thnot watershed was included in the *highest category for 'Risk of Impairment of Watershed Functions'* in Cambodia, largely due to poor forest and land management practices in the forested uplands. Please refer to *Map 1* below, rating risk impairment functions of Cambodian watersheds.

Map 1: Watershed Risk Classification



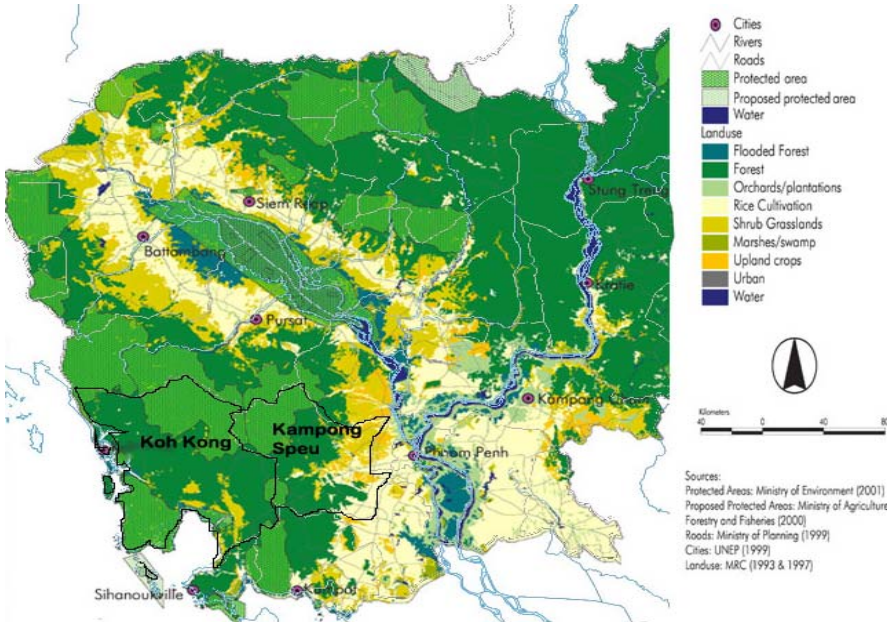
Source: MRC-GTZ WSMP, 2004

The Prek Thnot Watershed area was identified as an important site given risk impairment determined by area i) conversion from forest to non-forest; ii) establishment of new agricultural land, and iii) lowland area per capita. The importance of Prek Thnot was also underscored by the study for its importance as pilot area for the 'implementation of interventions related to the forestry sector.'[16]

Map 2 below broadly highlights land use in the two focal provinces (Koh Kong and Kampong Speu) and the marked convergence of upland crop and rice areas (yellow) with forests and protected areas (green).

[16] Schindele, Werner, Kalyan Hou, Ken Serey Rotha, Luyna Ung, Socheat Mao. Consultancy Report: "Management of Pilot Watershed Areas in Cambodia Baseline Survey." MRC-GTZ Cooperation Programme Agriculture, Irrigation and Forestry Programme Watershed Management Project (WSMP). 2004.

Map 2: Koh Kong and Kampong Speu Provinces: Land-use.



Source: ICEM. Mekong Protected Areas Program, 2006.

Large rice production occurs in the middle and downstream reaches of the basin. Rice is cultivated depending on the rainfall (rainfed) and is of low productivity and unstable production. In downstream areas, floods occur frequently due to backwater from the Mekong River during the wet season. The Prek Thnot Dam is located in the middle reaches of the river, and generates electricity for the city of Phnom Penh. (Maps 1 and 2 above provide a perspective of the adjoining watersheds).

The Project targets three Upper Prek Thnot Watershed Districts covering 746,255 hectares, and including i) Aural (or Aoral) and ii) Phum Sruoch Districts of Kampong Speu Province, and iii) Thmar Bang District of Koh Kong Province. *Table 1,* below represents sample PIF concept baseline, with GEF target at ca. 10%.

Table 1: Project Area, house hold data and land use.

Province	**District**	**Poverty rate (2010)**	**No. of Families-HH (2010)**	**Total population/person(2010)**	**No. of Female (2010)**	**Total dry rice land area (ha) 2010.**	**Total wet rice land area (ha)2010.**	**Total Land Area-ha (2009)**	**Total Forest area-ha (2009)**
Kampong Speu	Aural	40.20%	6,532	30,827	15,781	20	9,183	237,300	218,103
Kampong Speu	Phnum Sruoch	34.00%	19,353	102,150	51,964	151	18,968	171,435	100,839
Koh Kong	Thmar Bang	29.80%	1,311	5,999	2,710	10	2,598	337,520	*Not available*
Totals			**27,196**	**138,976**	**70,455**	**181**	**30,749**	**746,255**	**318,942**
GEF Target ca. 10%			2,720	13,898	7,046	18	3,075	74,626	31,894
Expected multiplier effect, ca. 30%			9,065	46,325	23,485	60	10,250	248,752	106,314

Source: MAFF, 2012.

The proposed Project will develop landscape level management interventions to restore and maintain forest cover and watershed stability functions while providing for sustainable livelihoods and ecosystem services within the upper Prek Thnot. Via SLM, coordinated landscape restoration and planning, the Project will bolster collaborative stakeholder management, productivity and protection of ecosystems and ecosystem service flows, (with co-benefits to SFM,

biodiversity, climate resilience and sustainable livelihoods) both within and between the two focal provinces and specifically at the forest interface. The geographic scope, restoration and demonstration targets will be further refined in discussions with MAFF and local stakeholders in the CEO endorsment phase.

The Baseline Project: ADB-BCC targeting Upland Cardamom Mountains Range Forests in Koh Kong Province.
In its first phase of implementation (2006-2010), the the Core Environment Program-Biodiversity Conservation Corridor Initative (CEP-BCI Phase I) was successful in:

(i) initiating the establishment of six pilot biodiversity conservation corridors bringing over two million ha of land under sustainable management regimes. This enhanced ecosystem connectivity and services including carbon sequestration estimated at 100 million tones of carbon dioxide, while improving livelihoods of local communities;
(ii) piloting three Strategic Environmental Assessments as an integrative decision support tool in sectoral plans in Viet Nam and Cambodia, and area based plans in the GMS North South Economic Corridor;
(iii) preparing and securing funding for BCI upscaling and climate change mitigation interventions to reduce emissions from deforestation and forest degradation (REDD);
(iv) strengthening institutional capacities within the environmental ministries and sectoral agencies for carrying out to environmental performance assessments (EPA), and spatial multi-criteria analysis (SMCA) for land use management; and
(v) instituting sustainable financing mechanisms, including commune/village level revolving funds and supported countries to create policy enabling condition to pilot payment for ecosystem services (PES).

Specific to Cambodia, the Phase I project developed community-based ecotourism potentials in Chi Phat; an initiative to create carbon trading zones in the Cardamoms, and; REDD+ potentials in Chi Phat, Phnom Samkos Wildlife Sanctuary, and the Central Cardamoms Protected Area.

The CEP-BCI Phase II (2011-2018) Program includes a regional project (CEP-BCI), and national projects targeting Vietnam, Laos and Cambodia and entitled the 'GMS Biodiversity Conservation Corridors Investment Project' (BCC). Within Cambodia, the BCC project (ADB $20M Cambodia grant) represents up-scaling of the successes and lessons learned in the phase I CEP-BCI pilot.

The current upscaling within the Cambodia BCC project has been designed to focus on Mondulkiri and Koh Kong Provinces. Koh Kong Province and Kampong Speu Province comprise key areas of the Prek Thnot watershed, the target of this proposal. More precisely, the BCC will target upland Koh Kong forest areas to maintain and consolidate forest ecosystem connectivity between the Central and Southern Cardamom Protected Forests, and linking Botum Sakor National Park, the Peam Kasop Wildlife Santuary and the Dong Peng multiple use area to the developing biodiversity conservation corridor.

Map 3: ADB-BCC Target Communes.

With an intended impact of climate-resilient sustainable forest ecosystems benefiting local livelihoods, and a main outcome of 'sustainably managed biodiversity corridors in Cambodia', the design of the BCC is embedded within a multipurpose, sustainable, biodiversity landscape approach. Main outputs of this project include: (i) institutions and communities strengthened for biodiversity corridor management; (ii) biodiversity corridors restored, protected, and maintained; (iii) livelihoods improved and small-scale infrastructure support provided in target villages and communes; and (iv) project management and support services operationalized. The Ministry of Environment (MOE) and the Ministry of Agriculture, Forestry and Fisheries (MAFF) collaborate within the program and are responsible for technical oversight, with day to day implmentation respectively delegated to the General Department of Administration and Nature Conservation and Protection (GDANCP) and the Forestry Administration (FA) which serve on the Central Project Coordination Unit to advise Provincial Management Units, District and Commune teams.

The BCC-Project will cover 10 communes in Koh Kong which are predominantly in mountainous areas covered with protected forests, National Parks, and wildlife sanctuaries. Arrangements have been made for Thmar Bang District (in north eastern Koh Kong Province, and adjacent Kampong Speu) to be added to the BCC project. The areas of relevance to the SLM project is the baseline project's work in the large block of protected land making up a corridor of protection linking the Central Cardamoms Protection Forest (CCPF) with the Phnom Samkos Wildlife Sanctuary (PSWS) on the West and the Phnom Aural Wildlife Sanctuary (PAWS) to the east, thus linking CCPF, PSWS and PAWS with the Southern Cardamoms Protection Forest with further links along route 48 to the Peam Krasop Wildlife Sanctuary. Nearly 100% of Aural district is inside the boundary of PAWS.

Other relevant projects:
As additional and relevant Project baseline, the previous *UNDP-GEF Sustainable Land Management Program (2008-2011)* developed an enabling environment for SLM, an initial approach and NAP roadmap, as well as important awarenss of SLM's role in national development. More specifically, the program developed a set of best practice documents that will be reviewed and potentially used as resource within the Project (i.e. guidleines for agriculture, community forests, community protected areas). In discussion with Cambodian government counterparts and UNDP regarding important recommendations and lessons learned, this Project will expand baseline program efforts by integrating SLM into provincial, district and commune planning.

Among other applicable programs, the Project will be also coordinated with a developing *GEF-FAO* Project for Cambodia focused broadly to 'strengthen the adaptive capacity and resilience of rural communities using micro-

watershed approaches to climate change and variablity to attain sustainable food security in Cambodia.' Additional Project baselines are highlighted in section B6, below.

B. 2. incremental /Additional cost reasoning: describe the incremental (GEF Trust Fund/NPIF) or additional (LDCF/SCCF) activities requested for GEF/LDCF/SCCF/NPIF financing and the associated global environmental benefits (GEF Trust Fund/NPIF) or associated adaptation benefits (LDCF/SCCF) to be delivered by the project:

The primary Project objective is to restore and maintain forest cover and watershed stability functions while providing for sustainable livelihoods and ecosystem services in the upper section of the Prek Thnot watershed.

The proposed national Project forms a key element within the umbrella of the ADB-WB GEF *'Greater Mekong Sub-region Forests and Biodiversity Program'* (GMS-FBP). A unified landscape approach is lacking in the region and is recognized as a key constraint to development of regional ecosystem connectivity and address of forestland degradation and gaps in local-provincial capacities required for SFM, SLM, climate mitigation, the protection and maintenance of healthy, functioning ecosystems and sustainable production and livelihoods. The relationship between public and private sector land use, watershed management, SLM, SFM, lowland agriculture, and forest and biodiversity loss are key themes of the GMS-FBP, of the Cambodian NAP, and of this Project.

In the long term, the Project aims to develop Prek Thnot watershed stability and functions that include maintaining agro-ecosystem and forest ecosystem service flows, regulation of their soil and hydrological processes, related sediment transport and channel integrity and protection of the natural range of variability of a functioning, healthy watershed. In the short term, the Project targets interventions addressing important SLM, agricultural production and sustainable forest management interface contributing to stabilizing watershed functions and improved forest connectivity. The project design is organized through three components and related outcomes, including:

***Component 1*. Improved on–farm SLM management and practices.** The component is designed to enhance on-farm per/hectare productivity in middle to upper watershed areas with i) sustainable land and water management interventions piloted with approximately 2,720 households in agriculture production areas. The pilots will emphazie building site stable local production systems, improved soil and water conservation, improved nutrient cycling, crop rotation and soil horizon development, and improved water utilization and building up of soil-water retention capacities. UNEP/GEF SLM project (2008-2011) best practice guidelines, and proposed Cambodian National Agro-ecosystem guidelines will be reviewed, and where applicable applied and/or lessons built upon within the Project.

The use and suitability of ii) agroforestry will be piloted in the three (3) upper basin districts to assist development of productive gardens of diverse, perennial crop/tree species; improve household food security and individual incomes, and; build up diverse agro-ecosystems mimicking the form, function and connectivity of native forests to increase tree canopy and vegetative cover in forest buffer areas. This work will also improve local access to fuelwood and building materials. The Project recognizes that subsistence needs must be addressed first, and will encourage low-input, adaptable SLM/SFM methodologies and diversified cropping with species based upon defined ecological, economic and social criterion. In this system, staggered crop production will be encouraged to compliment seasonal wet-rice farming. Crop diversification in the district models will be furthered with training supporting individual farm plots, and recognition of the balance against economies of scale at the village level (which may eventually be fostered, where appropriate, through cooperative marketing).

iii) Agri-businesses managing Economic Land Concession (ELC) areas and contracting local farmers are also considered within this component. 25,000 ha. of ELC has initially been discussed with MAFF in the PIF stage. While specific companies, total hectares and more targeted approach will be further defined within Project CEO Endorsement phase, selected ELC areas will be provided farming models and guidance on practices to implement SLM. Forest encroachment by local households is expected to be reversed as conservation farming practices are applied, collaborative management and benefit sharing arrangements discussed and farmer household subsistence needs and agricultural incomes stabilized.

***Component 2*. Integrated agro-forest and forest ecosystem restoration on prioritized steep slopes areas.** While component 1 (*above*) is focused on private small holder farms and ELCs, component 2 targets forest canopy and vegetative cover on communal and publically managed lands. The component prioritizes critical upper watershed

areas to i) pilot demonstration of improved forest cover and vegetation on steep slopes in the three districts, and particularly within community/publically managed areas (e.g. cooperative farming, community-based forest area; nature reserves and wildlife sanctuaries).

Agroforestry and ii) forest restoration (including assisted natural regeneration in appropriate sites) will stabilize soil on upstream slopes, reduce sedimentation in downstream areas, and overall improve practice and management of the water catchment. Appropriate land restoration design of ca. 1,000 ha's will also include considerations building forest integrity, connectivity and result in Project co-benefits, including a decrease in upstream erosion and downstream sedimentation compared to the project baseline.

Component 3. **Improved stakeholder capacities for watershed management and monitoring** will promote collaboration between local authorities, communities and the agribusiness sector and technical and extension agencies for Upper Prek Thnot watershed management. The component also combines Component 1 and 2 stakeholder groups to i) establish a 'collaborative water management authority' for Kampong Speu Province. ii) Project platforms will increase stakeholder participation in watershed rehabilitation and management, and iii) guidelines, training, and tools will assist ongoing monitoring and assessment of ecosystem stablility, resilience and maintenance of critical regulating services.

Project work with Provincial and National departments to draft iv) appropriate SLM policy and regulatory instruments, including Landuse Law, will support both Project and Cambodian-UNCCD commitments, including v) development and piloting of a provincial monitoring framework for tracking watershed land degradation trends and impacts.

The above components are complemented by ADB-BCC and CEP-BCI interventions including:

- Landscape level corridor and and watershed management planning;
- Improvements in capacity of technical organizations (government and non government);
- Partnership building with private sector stakeholders, including agribusiness operations (who control large pockets of land that need to be stabilized) to ensure SLM enforcement and compliance.

Project activities are closely linked with work in upland forests/protected areas of the BCC project and Koh Kong Province, and are expected to be implemented within a collaborative framework with GEF funding to be used for important demonstrative activities and coordinated expansion of landscape level impacts between BCC and GEF; Koh Kong and Kampong Speu Province, and; coherent interventions that target Prek Thnot upper, mid and downstream basins.

By securing the proposed GEF funded project to the BCC-BCI baseline project, several incremental benefits accrue to Cambodia, the Greater Mekong Subregion and globally. These include:

- Targeting of critically important land uses and users, i.e. small holder farming and large scale commercial farming / landholding, that active (and wider) stakeholder consultation and participation are developed, and that watershed management is developed under a unified SLM guidance and regimen;

- The Cambodian national target is to increase rice production by 2015, and to become a net exporter of rice in order to improve incomes of smallholders and revenue from commercial agricultural ventures. This cannot be achieved without first addressing key soil erosion, land degradation and watershed stability issues;

- SLM work with ELC areas will emphasize compliance with Forest Law and regulations, respect for community and indigenous rights and sustainable use, access to information, and rights to effective remedy. The work is extremely important to developing effective landscape governance, and in environment, natural resource management, and upholding collaborative rural community economic, social and cultural criterion in the Project area.

- The Cambodian NAP seeks to demonstrate how to restore ecosystem services to agriculture through

efforts in forest protection, biodiversity conservation and climate resilience efforts. Cambodia, by virtue of the GEF project, can demonstrate pilot successes of its NAP in hightest priority watershed, and leverage additional funding and investments to replicate the successes of the pilot SLM and showcase results within the Greater Mekong Subregion (GMS) Economic Cooperation Program (ECP) within the Working Groups on Agriculture (WGA) and Environment Working Group (WGE, which meet biannually to promote investments and implement sectoral programs).

- Subregionally, the benefits of halting land degradation in terms of ecosystem services and land productivity are far reaching, and will translate into improved agriculture and forest management, sutainable livelihoods, natural resource conservation and more efficient and equitable resource utilization.

- Globally, the maintenance of large landscapes like the forested Cardamom Mountains and improving and restoring degraded landscapes enhance co-benefits to other focal areas, including SFM, biodiversity, climate adaptation and resilience, and GHG mitigation.

Overall, the Project addresses the need for a larger scale perspective and actions facilitating landscape and regional approaches and partnerships. The Project recognizes the critical linkage between upland forest and PA protection efforts (supported by the ADB-BCC baseline project) and the need to address drivers of lower and mid-basin land use change, management and practice (supported by GEF).

Without the GEF increment, further degradation of the lower and mid-basin Prek Thnot watershed is likely to continue unabated, accompanied by further encroachment into upland Cardamom forests and PAs with far reaching impacts on regional ecosystem services including soils and hydrological functions, climate resilience, biodiversity, agricultural productivity, livelihoods, food security and other tangible social and economic impacts. The GEF increment will benefit the improved management, sustainable use and protection of a high priority watershed, and will deliver much-needed holistic approach and integrated actions encompassing water, forest, climate, biodiversity, agriculture and other land uses and socio-economic factors.

B.3. Describe the socioeconomic benefits to be delivered by the Project at the national and local levels, including consideration of gender dimensions, and how these will support the achievement of global environment benefits (GEF Trust Fund/NPIF) or adaptation benefits (LDCF/SCCF). As a background information, read Mainstreaming Gender at the GEF.":

The direct beneficiaries of the project are poor upland farmers, indigenous communities, and women living in and dependent on the forest ecosystem in the Prek Thnot watershed and adjacent Cardamom Mountains in Cambodia. In Aural district, women outnumber men in nearly all villages. Female-headed households amounted in 2004 to 565 female headed households in villages inside the PA in Kampong Speu. Targeted households in remote mountainous areas with an average household income ranging between $160 to $450 will benefit from the project. Poverty rates among direct beneficiaries range from 25% to 60%.

Short-medium term project benefits will include increased household incomes, reduced production costs and improved yields from on-farm conservation farming practices, diversified agro-forest cropping, and restoration including improved financial stablility in times of drought and floods. Longer term Project benefits will include improved ecosystem service flows and increased watershed stablility from multiple stakeholder buy-in and coordinated SLM, sustainable use and the protection of area ecosystems and natural resources.

Co-financing and investments by BCC in stabilization of forest resources (restoration), livelihood interventions, and small-scale infrastructure will improve incomes and food security of rural households in the biodiversity conservation corridor. Livelihood assets will be directly supported through the provision of land use rights. The project addresses gender empowerment by narrowing gender disparities through access to economic and financial resources and opportunities (i.e., land with security of land tenure, off-farm employment opportunities) and enhancing voices and rights (i.e., with representation in project decision-making bodies).

Further, the Project will provide women in the target communities with inputs, guidance, and infrastructure (via BCC) that will enable increased productivity and incomes; reduce work burdens; and improve access to educational, health,

and social services. For vulnerable groups (primarily households headed by women), preferential opportunities will be considered and made available. Socio-economic benefits and gender dimension will be further analyzed and described in CEO endorsement phase.

B.4 Indicate risks, including climate change risks that might prevent the project objectives from being achieved, and if possible, propose measures that address these risks to be further developed during the project design:

Table 1: **Major risks and mitigating measures.**

Risk identified	Risk level with Mitigation	Mitigation Measure
Ad hoc development investment decisions override long-term Prek Thnot landscape and and ecosystem management plans.	Medium	The Project promotes active collaboration between local authorities, communities, small farmers, ELCs, development sectors and technical agencies for watershed management and planning. The baseline BCC project will also be addressing land use planning, community infrastructure and tenurial security. Strategic environmental assessments of corridor plans under the CEP-BCI will also assess and provide a framework for addressing investment risks and trade-offs.
Limited technical implementation capacities, limited abilities in project contract management, finance.	Low	Project preparatory actions will provide targeted capacity building and training to government instituions, extension departments, to communities and other landscape stakeholders. Implementation will involve targeted ADB and consulting services, and is to be phased with performance-based rewards and incentives.
Local farmers are risk adverse, resist change to known susbsistence farming methods;	Low	The project targets mobilization of community participation and emphasizes participatory approaches. Ongoing consultation with local civil society organizations will also help to mitigate the risk. Improved community-based agriculture, forestry and productivity gains promoted by the project will provide additional incentives.
Agro-forest production systems promoted fail to develop gains in forest area or improved forest ecosystem services.	Low	The Project will promote best practices in agro-forestry (i.e. such as via Analog Forestry methodology) which emphasize bio-diverse, site stable agro-forest ecosystems and the development of forest canopy and soil horizon. The choice/placement of species will be determined with community inputs and sound-scientific advise to balance social, economic and environment requirements for improved food security, income, watershed ecological integrity, biodiversity connectivity, etc. A similar SLM/SFM multi-sustainablity criteria will also be applied to guidance within the concession areas.
Extreme weather fluctuations, e.g. floods, droughts, landslides.	Medium	Mitigating agro-ecosystem risk, protecting ecologocial flows, and building resilience and sustainability are central to the project. The project will create assessment, awareness and capacity which could be used in leverage of disaster preparedness planning.

B.5. Identify key stakeholders involved in the project including the private sector, civil society organizations, local and indigenous communities, and their respective roles, as applicable:

Table 2: **Key stakeholders and their respective roles.**

Key Stakeholders	Roles
Direct Beneficiaries	
Local small holder farmers and indigenous communities/ interest groups.	Local subsistence farmers are the main stakeholders of the Project. The category includes contract farmers working in concession areas. As key target beneficiaries, local farmers, their communities and interest groups will actively participate in upper

	basin watershed and forest protection and restoration, agro-ecosystem and related livelihood, awareness and community-based activities.
Project Supporters and Direct Stakeholders	
Local NGOs and civil society organizations.	Local civil society organizations will inform implementation activities and help to facilitate the partipation of communities in the Project.
Commercial land concession holders / firms / agribusiness	Private sector agriculture and forestry stakeholders will work to implement SLM/SFM in concession areas with contract farmers, and establish sustainable harvest regimens, supportive processing and marketing with farmer cluster groups for agro-forest products. Roles to be more carefully identified in preparation of CEO endorsement.
Village heads and leaders; commune officials; District Officials.	Will help to convince farmers on the necessity of new SLM and SFM measures, motivate their participation, ensure that Project and government extension programs are aligned in implementation, mobilize consultation with communities and generally facilitate collaboration at the local level within the project.
Land users / managers (other sectors such as roads, energy, etc)	Upper Prek Thnot basin land users and managers will participate in project and institutional consultation contributing to inter-sectoral planning and actions supporting the reduction of pressures on area natural resources from competing land uses in the wider landscape.
Policy and Decision Makers	
National Government and Provincial Officials	Will provide consistent structures and platforms for the implementation of the project, with ongoing information sharing supporting current and proposed national and provincial policy, institutional reforms for SLM planning, full participation of stakeholders, related measures advancing land tenure, land and natural resource use accountability, etc. To benefit sustained regional ecosystem service flows, better targeting of poverty alleviation, improved climate resilience and biodiversity co-benefits, etc, where possible policy and decision makers will mainstream and operationalize project models and knowledge within national and provincial policy, planning and budgeting processes.
Implementing Agencies	
Ministry of Environment (MOE)	As Cambodia's GEF operational focal point, the MOE is responsible for project technical oversight, policy guidance, review and endorsement. The MOE is also focal point for key conventions (CBD, UNFCCC, and UNCCD) and plays a key role in coordination with other relevant ministries and stakeholders.
Ministry of Agriculture, Forests and Fisheries (MAFF)- Forest Administration (FA).	MAFF is the key Executing Agency (EA) within the Project, and oversees agriculture, natural resource development policies and sector development plans, extension, land reform and utilization, etc. Under MAFF, the FA will oversee forest resource use and conservation and importantly community forest programs, forest agreements and improved forest concession management.
Koh Kong (BCC) and Kampong Speu (GEF) Provincial Project Management Units.	The Provincial PPMUs guide day to day Project management and ensure inter-agency coordination at the provincial level.

B.6. Outline the coordination with other related initiatives:

Table 3: **Core Baseline Projects for coordination/additionality.**

Core Baseline Projects	Strategic opportunities and needs	Proposed Projects and GEF Increment
ADB Biodiversity Conservation Corridors Project in Koh Kong and Mondulkiri Provinces (under implementation). 2010-2018 *Objectives:* Impact: Climate-resilient sustainable forest ecosystems benefiting local livelihoods. Outcome: Sustainably managed biodiversity corridors in Cambodia. Outputs: (i) institutions and communities strengthened for biodiversity corridor management; (ii) biodiversity corridors restored, protected, and maintained; (iii) livelihoods improved and small-scale infrastructure support provided in target villages and communes; and (iv) project management and support services operationalized.	▪ Will enhance national political support, investments, and management capacity in a landscape based approach ▪ Provides on the ground investments in management effectiveness that engage communities and government authorities in conservation within Koh Kong Province/upstream areas. ▪ Opportunity to link cross-boundary provincial landscape wide strategies that link PAs, buffer zones and livelihoods. ▪ Opportunity to recognize biodiversity and conservation landscape co-benefit values in subnational development processes, such as Economic Land Concessions within Kampong Speu. ▪ Land degradation monitoring (GEF); Biodiversity and law enforcement monitoring and reporting systems (BCC). ▪ Development of financing mechanisms for conservation landscapes (and PAs) with ecosystem service valuation and conservation payment schemes (CEP-BCI).	*Objective*: to restore and maintain forest cover and watershed stability and functions while providing for sustainable livelihoods and ecosystem services in the upper section of the Prek Thnot watershed. *GEF Increment:* The Project will protect agro-ecosystem service flows, expand forest cover and landscape connectivity in southern Cardamoms with mid-basin/downstream areas; demonstrate integrated focal area objectives through upper and mid basin watershed rehabilitation; link Kampong Speu Province to Koh Kong BCC activities; provide greater opportunities to apply and sustain best SLM, SFM practices; improve landscape level on-farm soil and water management; integrated watershed management, diverse agro-forestry and reforestation on steep slopes and; overall improve watershed LD management institutional development and UNCCD monitoring capacity.
ADB Core Environment Program and Biodiversity Conservation Corridors Initiative, Phase II (*ADB CEP-BCI II*) 2012-2016. The regional project will: i) build environmental planning systems, methods, and safeguards; ii) improve management of transboundary biodiversity conservation landscapes and local livelihoods; iii) establish climate-resilient and low-carbon strategies and; iv) improve institutions and financing for sustainable environmental management.	• CEP-BCI has key indicators including an increased number of GMS Economic Cooperation Program (ECP) plans and investments with improved environmental and social safeguards; increased sector investments leveraged for improving climate resilience and environmental management in the GMS; iii) and draft bi-lateral or multi-lateral arrangements on managing cross-border biodiversity conservation corridors/ protected areas are agreed. • The iniative deals with cross cutting issues, including poverty reduction, gender, capacity development and national-regional level issues.	The Project will assist this regional project with coordinated sub-national and national level actions for sustainable land management and sustainable forest management of priority watershed and conservation landscape, including development of ecosystem service profiles that CEP-BCI II may consider for PES uptake.
Building Capacity and Mainstreaming Sustainable Land Management (UNDP) 2008- 2011	▪ The project focused on Cardamom Mnts, areas of Aural District and agriculture diversification. ▪ The SLM project has three outcomes: completed the UNCCD National Action Program; enhanced capacity and built awareness to plan and implement SLM; and began to	Project application of SLM best practice guidelines in watershed management activities; continued integration of SLM into national and sectoral policies and planning; expansion of efforts in this regard to Upper Prek Thnot priority watershed within Kampong Speu

	integrate SLM into national and sectoral policies and regional planning.	Province.
Tonle Sap Conservation Project (TSCP) – MoE & UNDP 2004- 2011	▪ TSCP aimed to develop management capacity for biodiversity conservation in the Tonle Sap Biosphere Reserve through improving management capacity for three core conservation areas; biodiversity monitoring and management system; awareness, education and outreach; and empowerment of women.	With links in Upper Cardamom's (via BCC and CEP-BCI), integrate Project LD, SLM and SFM considerations within the strengthening of bufferzone and PA management capacities.
Conservation Areas through Landscape Management in the Northern Plains (CALM) – MoE & UNDP 2005- 2012	▪ The CALM project aims to support provincial-level land use planning processes, demonstrate land-use interventions at three key sites, and strengthen biodiversity management by government in two protected areas in the northern plains.	Build off lessons to support inter-provincial land use planning processes supporting agro-ecosystem upstream-to-downstream restoration and flow maintenance.
Strengthening Sustainable Forest Management and the Development of Bio- energy Markets – MAFF & UNDP/FAO (GEF/LDCF) 2010-2014	▪ The SFM 'NAPA follow-up' project aims to strengthen national SFM policy, integrate community-based sustainable forest management into policy, planning and investment frameworks and create markets for sustainable bio-energy technologies that reduce CO2 emissions.	Project reviews and applies, where appropriate, community-based SFM policy and 'biodiversity safeguards' in concession and community-based watershed and critical forest areas.
GEF Small Grants Program – UNDP and AusAid	▪ Various community-based projects; SGP also manages the Mekong Australia- Pacific Community Based Adaptation Project (MAPCAP /AusAid).	Various agro-ecosystem and forest adaptation measures that present opportunities for scaling up.
Cambodia – UNDP, UNEP and FAO, Forest Carbon Partnership Facility Cambodia Readiness Preparation Proposal and UNREDD+ Roadmap Cambodia - UNDP/FAO, Strengthening Sustainable Forest Management and the Development of Bio-energy Markets	▪ Landscape wide conservation strategies that link PAs, buffer zones and livelihoods ▪ Models for valuation of ecosystem services ▪ Recognition of conservation landscape values in sub-national development processes ▪ Biodiversity monitoring and reporting systems	The projects listed will draw out the experiences, lessons and create synergies with the GEF national, CEP BCI and Regional GMS-FBP projects dealing with ecosystem services valuation. The Project will demonstrate forest restoration protocols that may be used in REDD+ programmes.
WWF-GMPO FY11-15 Strategic Framework.	Focuses on Species and Landscape Goals, including: By 2015, (i) Population of Global Flagship and Eco-region Priority Species in the Mekong river and Priority landscapes are restored, maintained, and increased, and (ii) the ecological integrity and ecosystem services of 200,000 km^2 of the Mekong River and Priority Landscape are protected, maintained and restored.	The national project, CEP-BCI and GMS FBP Regional Support Project offers unique opportunities for GEF to play a leading role in (i) securing landscape integrity and climate resilience through integrated conservation-economic development planning and implementation; (ii) strengthening law enforcement and protected area management to secure priority landscapes (and BD co-benefits); and (iii) securing sufficient sustainable and leveraged financing for critical watershed and ecosystem protection.

Other programs for linkage: In addition to the project's listed above, the Project requires further coordination in the CEO endorsement preparation phase with but not limited to the following projects and programs:	
The Cardamom Mountain Protected Area Network--Conservation Trust Fund	• Conservation International and Flora and Faua. Cardamom Mountain Business Plan supporting Phnom Samkos Wildlife Sanctuary (PSWS), Phnom Aural Wildlife Sancturary (PAWS) and the Central Cardamoms Protected Forest (CCPF).
Lutheran World Federation. "Rural Development through Empowerment Project. "	• Operating in all 70 villages of Aural District. The project operates Farmers" Field Schools (FFS) for training in integrated agricultural farming systems, supports development of small irrigation, and provides seedlings and establishment of demonstration plots. The LWF has a Community Development Worker for every 2-3 villages and provides agricultural support and other support to the poorest households.
JICA, Danida, DFID	• National programs supporting climate change, land degradation, and forest reform; including DANIDA/DFID NRM and Livelihoods Program (NRMMLP).
IFAD/UNDP Rural Livelihoods Improvement Project (RULIP, 2009-2013)	• Implemented by MAFF, the goal of the project is that the agricultural livelihoods of the rural poor in the targeted communes of the three provinces (*Kratie, Preah Vihear* and *Ratanakiri)* are improved.
Flora and Fauna International (FFI) projects	FFI is implementing numerous projects in Cambodia including focused primarily on biodiversity conservation and landscape restoration.
FAO GEF LDCF project (proposed 60 months):	• The proposed National GEF- LDCF project is being developed to srengthen 'the adaptive capacity and resilience of rural communities using micro-watershed approaches to climate change and variability to attain sustainable food security.' The project will also advance NAP work, presents valuable coordination potentials, but does not include the geographic or thematic focus addressed by this Project.
Stockholm Environment Institute	Initial research supporting evidence based descion making and valuation for Cardamom ecosystems (Soussan, John).
Wildlife Alliance, Southern Cardamom Restoration Programme.	The program targets poor landless farmers and assists them to gain access to land, capital, skills and markets. The program involves community agriculture (and ecotourism), and links to applications should be further explored in the CEO endorsement phase.
UNEP- Adaptation Fund, Cambodia; 'Enhancing Climate Resilience of Rural Communities Living in Protected Areas of Cambodia.' Total Project Cost: USD 4,530,288.	Proposal submitted to the AF Board Review Committee, (2011 December, Durban). The overall goal of the proposed AF project is to increase food supply and reduce soil erosion in and surrounding at least four CPAs in Cambodia by restoring at least 2,500 ha of degraded forests with plant species that are particularly appropriate for this goal, as well as intensifying and diversifying the productivity of at least 2,500 family homegardens (ranging in size from 0.2 ha to 1 ha) in communities living around the CPA forest sites.

C. DESCRIBE THE GEF AGENCY'S COMPARATIVE ADVANTAGE TO IMPLEMENT THIS PROJECT:

With support from the Asian Development Bank, Greater Mekong Subregion Governments identified the most important conservation landscapes in the subregion that are vulnerable to increased development pressures and environmental degradation. The ADB is currently implementing Phase II of the Biodiversity Corridors Conservation Project in Ko Kong

Province and has been implementing the Greater Mekong Subregion Biodiversity Conservation Corridors Initiative since 2005, when the pilot phase was endorsed by the GMS Summit of Leaders in Kunming. Close relations are maintained with the both donors and international conservation NGOs that have related programs in the region and within Cambodia. ADB also manages the program of the Working Group of Environment Ministers of the GMS countries as well as the Environment Operations Centre (ADB-EOC) in Bangkok and is strategically positioned to deliver both national and regional support services related to GMS and Cambodian landscapes, sustainable forest and land management.

C.1 Indicate the co-financing amount the GEF agency is bringing to the project:

The ADB-BCC Project will be the main co-financing partner in the Project, with amount of $13M. The Royal Cambodian Government via GEF OFP has initially confirmed $300,000. Initial discussions on co-financing have also taken place with other projects and donors. Co-financing will be further assessed with commitments officially secured within preparation of the CEO endorsement document.

C.2 How does the project fit into the GEF agency's program (reflected in documents such as UNDAF, CAS, etc.) and staff capacity in the country to follow up project implementation:

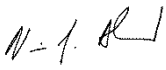
The Project "*Collaborative Management for Watershed and Ecosystem Service Protection and Rehabilitiation in the Cardamom Mountains, Upper Prek Thnot River Basin"* falls under the proposed ADB-WB GEF Forest and Biodiversity Program in the Greater Mekong Subregion (GMS-FBP). The ADB Core Environment and BCI Programs fall under the *GMS Economic Cooperation Program Strategic Framework* (CEP, 2012-2022). The Project is also consistent with the *ADB Country Partnership Strategy* (CPS) for Vietnam and the *GMS Regional Strategy*. It is also aligned with *ADB Strategy 2020*, and its *Environmental Operational Directions (2011-2020)* which highlight the need for integrated environment management programs to address climate change and biodiversity conservation.

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

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

NAME	POSITION	MINISTRY	DATE *(MM/dd/yyyy)*
Mr. Lonh HEAL	Director General	MINISTRY OF ENVIRONMENT CAMBODIA	**11/17/2011**

B. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF/LDCF/SCCF/NPIF policies and procedures and meets the GEF/LDCF/SCCF/NPIF criteria for project identification and preparation.					
Agency Coordinator, Agency name	**Signature**	**DATE** *(MM/dd/yyyy)*	**Project Contact Person**	**Telephone**	**Email Address**
Nessim Ahmad Director, Environment and Safeguards concurrently Practice Leader (Environment) Asian Development Bank		04/09/2012	Sanath Ranawana, Senior Natural Resources Specialist	+66 2 263 5341	sranawana@adb.org