

ANNEX 1

Greater Mekong Subregion Forests and Biodiversity Program (GMS-FBP) (Sept 15, 2011)

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Annex A-1. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S): (Please attach the [Operational Focal Point endorsement letter \(for Qualifying GEF Agency\)](#) and [Operational Focal Point Endorsement letter \(for Program Coordination Agency\)](#) with this template.

NAME	POSITION	MINISTRY	DATE (MM/dd/yyyy)
Mr. Lonh HEAL	GEF Operational Focal Point for Cambodia/Technical Director General	Ministry of Environment	
Ms. Jiandi YE	GEF Operational Focal Point for China / Director, International Department	Ministry of Finance	
Mr. Khampadith KHAMMOUNHEUANG	GEF Operational Focal Point for Lao/ Deputy Director General	Environment Department Science Technology and Environment Agency (STEA)	09/12/2011
Mr. Hla Maung THEIN	GEF Operational Point for Myanmar/Joint Secretary	National Commission for Environmental Affairs (NCEA)	
Mr. Chote TRACHU	GEF Operational Focal Point for Thailand/Permanent Secretary	Ministry of Natural Resources and Environment	
Dr. Van Tai NGUYEN	GEF Operational Focal Point for Viet Nam/Director General	Ministry of Natural Resources and Environment (MONRE)	

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The letters of endorsement will be added to this Annex.

Annex A-2: Executive Summary

Greater Mekong Subregion Forests and Biodiversity Program

Forests and biodiversity in the Greater Mekong Subregion (GMS) are under enormous pressure from rapid economic development. The expansion of transportation links into once inaccessible ecosystems is dramatically changing the character of forest landscapes in the region, resulting in loss of forest cover and the fragmentation of habitats. The cumulative effects of economic growth, poor forest management practices, overexploitation of resources and climate change stress have placed many ecosystems and species in peril. The GMS Forests and Biodiversity Program seeks to significantly change this trajectory through the collaborative efforts of the Global Environment Facility (GEF), Asian Development Bank (ADB), The World Bank, and other partner conservation programs and stakeholders in the region.

The ongoing incremental loss of forests and habitat connectivity is having a cumulative effect on regional biodiversity. Maintaining a forest land base that supports globally important species requires a more coordinated, strategic approach within the GMS. It is this **vision of a sustainable network of priority conservation landscapes at a regional scale** that is central to the program. The program strategy is principally to coordinate a set of national projects (with GEF and other partner support) in priority conservation landscapes, supported by additional regional technical assistance, capacity building and exchange of experiences/knowledge development.

The program vision is derived from the commitment made by GMS countries in their Economic Cooperation Program to “(i) establish common framework and necessary operational capacity for addressing environmental protection and management challenges, and (ii) prevent and mitigate environmental hazards and threats from environmental degradation in the sub-region” (*Vientiane Plan of Action for GMS Development 2008-2012*). The principal aim of the GMS Forests and Biodiversity Program is to **increase investments and improve the management and climate resilience of high priority forest biodiversity conservation landscapes including protected area systems of the Greater Mekong Subregion (GMS), recognizing the pressures on these landscapes from development and climate change**. The program will support protected areas, forests, land and watershed management, climate change adaptation and mitigation, and sustainable livelihoods development.

This initiative is a joint effort to align GEF and other programs in a targeted manner to address strategic regional and landscape scale issues that cannot be readily tackled by individual countries. It will assist trans-boundary issues such as harmonizing conservation policies and planning across borders, promoting cooperation on reducing illegal trade in wildlife and forest products, developing the standards and capacities for maintaining protected areas and conservation landscapes, mobilizing additional and long-term sustainable finance for conservation, and providing the mechanisms for GMS countries to exchange experiences and to advance regional knowledge on common challenges.

The Outcomes focus on:

- Enhancing the management effectiveness, resilience and connectivity of priority ‘conservation landscapes’ including key trans-boundary protected areas zones;
- Strengthening decision-making processes for the protection and management of ‘conservation landscapes’ and protected area systems and networks through economic valuation of biodiversity

and ecosystems services, mainstreaming biodiversity at sector and project levels, and the development of sustainable financing mechanisms;

- ❑ Enhancing capacity to manage landscape-wide biodiversity values in an integrated cross-sectoral manner that jointly addresses biodiversity, forest management (SFM/REDD+), land and watershed degradation and climate change with sustainable livelihoods development; and
- ❑ Reducing the level of illegal trade in wildlife and forest products and the cross-border transfer of illegal activities and sub-standard forestry operations that often migrate between GMS countries.

The GMS Forests and Biodiversity Program seeks a strategic change in the ‘business as usual’ approach to forest and biodiversity management. The large scale forces that are driving the decline in the quantity and quality of the forest land base for biodiversity warrant an equally large scale, joint effort to identify, protect, rehabilitate and sustain the landscape attributes that support critical biodiversity values, ecosystem functions and related natural resource livelihood systems in GMS. Three components are proposed:

1. Policies, institutions and cooperation for managing conservation landscapes and protected area systems at national and regional levels.
 - Policies, laws and regulations strengthened for the protection and management of conservation landscapes, including protected areas and trans-boundary landscapes.
 - Institutions strengthened for the protection and management of conservation landscapes, including protected areas and trans-boundary landscapes.
 - Increased regional cooperation and integrated sector planning for the protection and management of conservation landscapes in GMS.
 - Reduced illegal wildlife and forest product trade at landscape, national and regional levels
2. Ecosystem protection and management investment in key conservation landscapes and protected areas.
 - Avoided deforestation and forest degradation; and conservation and enhancement of forest carbon stocks and forest cover.
 - Increased climate change resilience of ecosystems and communities in key conservation landscapes.
 - Increased habitat connectivity in fragmented conservation landscapes.
 - Improved status of threatened species of global significance in GMS.
 - Improved food security and livelihoods for communities in priority conservation landscapes
 - Improved data and information systems for protected area management, biodiversity assessment, monitoring and policy enforcement.
 - Improved measurement, reporting and verification (MRV) mechanisms for forest carbon assessment.
 - Good practices for landscape conservation generated, shared and adopted in GMS countries.
 - Increased funding mobilized for landscape conservation and protected areas, including the expansion of financing mechanisms such as PES and REDD+, including carbon wildlife premium.
 - Partnerships strengthened for the sustainable management of conservation landscapes in the GMS.

3. Knowledge, capacity, partnerships and sustainable financing

- Improved data and information systems for biodiversity assessment, monitoring and enforcement.
- Improved measurement, reporting and verification (MRV) mechanisms for forest carbon assessment.
- Good practices for landscape conservation generated, shared and adopted in GMS countries.
- Increased funding mobilized for landscape conservation and protected areas, including the expansion of financing mechanisms such as PES and REDD+.
- Partnerships strengthened for the sustainable management of conservation landscapes in the GMS.

The program goal is **to enhance the management effectiveness of high priority forest biodiversity conservation landscapes** including protected area systems in GMS, recognizing the pressures on these landscapes from development and climate change. The program will be implemented through collaboration with GMS countries based on:

- voluntary alignment of selected National Projects within a common program results framework where GMS countries agree on the mutual benefits of a cooperating through a regional GEF program;
- supplementing National Projects with Regional Support Project activities that scale-up National Project results and address region-wide issues;
- use of multi-focal area national and regional projects with combined funding from the GEF and other partners, including support for SFM, REDD+, and climate change adaptation programs that target high value conservation landscapes and protected areas in GMS;
- integration of the *Global Tiger Initiative* (Global Tiger Recovery Plan endorsed by Heads of State in November 2010) with the GMS Forests and Biodiversity Program;
- strategic support for trans-boundary conservation landscapes of regional importance that warrant a coordinated effort by GMS countries and that build models of effective regional cooperation; and
- leveraging synergies with national and regional programs, including the GMS Core Environment Program and Biodiversity Conservation Initiative (CEP-BCI), the programs of The World Bank, UNEP and other donor programs.

GEF and SCCF Funding requested for the program is estimated at \$ 32.2 million, with over \$151 million in co-financing from the program partners.

Annex A-3. List of Acronyms

ADB	Asian Development Bank
BCC	Biodiversity Conservation Corridors
BCI	Biodiversity Corridors Initiative
Biodiversity	BD
CCA	Climate change adaptation
CEP-BCI	Core Environment Program – Biodiversity Corridors Initiative
CCA	Climate change adaptation
CCM	Climate change mitigation
FCPF	Forest Carbon Partnership Fund
FIP	Forest Investment Program
GEF	Global Environment Facility
GHG	Greenhouse gases
GMS	Greater Mekong Subregion
IDA	International Development Assistance
LD	Land degradation
LULUCF	Land Use, Land-Use Change and Forestry
MRV	Monitoring, Reporting and Valuation
Moue	Memorandum of understanding
NBSAP	National Biodiversity Strategy and Action Plans
NPFE	National Portfolio Implementation Exercise
PA	Protected area
PES	Payment for ecosystem services
REDD	Reducing Emissions through Deforestation and Degradation
SCCF	Special Climate Change Fund
SFM	Sustainable Forest Management
STAR	Strategic Targeting and Allocation of Resources
UNEP	United Nations Environment Program

Annex A-4: Baseline Context and Proposed GMS-FBP Additionality

Projects	GEF FA	Dates	Project Objectives	Potential 'additionality' from GMS-FBP
Cambodia				
Tonle Sap Conservation Project (TSCP) – MoE & UNDP	BD	2004-2011	TSCP aims 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.	<i>Support sustainability of progress in strengthening management capacity for PAs</i>
Conservation Areas through Landscape Management in the Northern Plains (CALM) – MoE & UNDP	BD	2005-2012	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.	<i>Support sustainability of progress in strengthening management capacity for PAs</i>
Strengthening Sustainable Forest Management and the Development of Bio-energy Markets – MAFF & UNDP/FAO (GEF/LDCF)	SFM: BD,CC A LD	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.	<i>Advancement of 'biodiversity safeguards' in forest management</i>
Building Capacity and Mainstreaming Sustainable Land Management (UNDP)	LD	2008-2011	The SLM project has three outcomes: complete the UNCCD National Action Program; enhance capacity to plan and implement SLM; and integrate SLM into national and sectoral policies and regional planning.	<i>Application of SLM best practices in watershed management activities</i>
GEF Small Grants Program – UNDP and AusAid	Multi focal	ongoing	Various community-based projects; SGP also manages the Mekong Australia- Pacific Community Based Adaptation Project (MAPCAP /AusAid).	<i>Various adaptation measures scaling up opportunities</i>
ADB Biodiversity Corridors Conservation Project in Monduliri and Koh Kong Provinces	Multi-focal	2011-2015	(i) Provide forest tenurial security to poor households and ethnic minority groups for collective management of forest resources; (ii) restore habitat on degraded forest lands with tree planting of natives species and agroforestry models with improved sources of non-timber forest products; (iii) improve livelihoods and income enhancing small scale infrastructure; and (iv) generate over 1 million cash-based labor days through project activities.	<i>Coordinate, expand and mainstream conservation measures across the landscape as a whole, including protected areas</i>
China				
Guangxi Integrated Forestry Development and		2006-2012	An integrated approach to managing Guangxi's natural forests, watersheds and biodiversity at the landscape level to improve the	<i>Increased recognition and</i>

Projects	GEF FA	Dates	Project Objectives	Potential ‘additionality’ from GMS-FBP
Biodiversity Conservation, UNDP			supply, management, sustainability, and environmental condition of forest resources in Guangxi Autonomous Region and to conserve its globally significant biodiversity	<i>support for priority conservation landscapes</i>
Priority Institutional Strengthening and Capacity Development to Implement the China Biodiversity Partnership and Framework for Action, UNDP	BD	2008-2014	The development of the national policy and institutional framework for biodiversity conservation, bringing closer to international best practices	<i>Technical inputs useful for biodiversity conservation frameworks</i>
Strengthening the Effectiveness of the Protected Area System in Qinghai Province, UNDP	BD	2010-2016	To catalyze management effectiveness of Qinghai’s PA system to fulfill its purpose of conserving globally important biodiversity	<i>Lessons from GMS for national landscape conservation programs</i>
ADB Core Environment Project –Biodiversity Conservation Initiative (CEP-BCI)	Multi-focal	2012-2016	Environmental sustainability best practices, safeguards, and climate friendly measures are integrated in selected GMS ECP sector strategies and investment plans, economic corridors and biodiversity conservation corridors and landscapes.	<i>Lessons from GMS for national landscape conservation programs</i>
Lao PDR				
Mainstreaming Biodiversity into Agriculture and Land Management in Lao PDR’s Policies Programmes and Plans and Improving the Resilience of the Agriculture Sector in Lao PDR to Climate Change Impacts (UNDP/FAO)	CCA	2010-2014	The project aims to develop national policy and institutional frameworks for sustainable use, and <i>in-situ</i> conservation of biodiversity in agro-ecosystems, and develop capacities and incentives to mainstream biodiversity, especially agro-biodiversity, at all levels. The related second project will strengthen knowledge on climate change impacts on agricultural production and food security, develop capacities of planners and producers, and demonstrate and promote community based adaptation.	<i>Potential integration of successful agro-biodiversity strategies into landscape conservation programs in GMS</i>
Protected Area Management Models for Lao PDR: Learning and Disseminating Lessons from Nam Et-Phou Louey – MAF & WB	BD	PIF approved 19 Jan 2010	Strengthen the terrestrial protected area (PA) network of Lao PDR by demonstrating and disseminating replicable innovative working models for sustainable natural resource use, ecotourism-based livelihoods and sustainable PA financing. Implementing Agency: Wildlife Conservation Society	<i>Contributions toward region-wide knowledge and development of financing options</i>
ADB Biodiversity	Multi-	2011-	(i) Provide forest tenurial security to poor households and ethnic	<i>Coordinate, expand and</i>

Projects	GEF FA	Dates	Project Objectives	Potential ‘additionality’ from GMS-FBP
Corridors Conservation Project in Champusak and Sekong provinces	focal	2015	minority groups for collective management of forest resources; (ii) restore habitat on degraded forest lands with tree planting of natives species and agroforestry models with improved sources of non-timber forest products; (iii) improve livelihoods and income enhancing small scale infrastructure; and (iv) generate over 1 million cash-based labor days through project activities.	<i>mainstream conservation measures across the landscape as a whole, including protected areas</i>
Sustainable Natural Resource Management and Productivity Enhancement Project, ADB/IFAD	Multi-focal	2009-2015	Enhanced institutional capacity at provincial and national levels to manage natural resource utilization in a sustainable manner.	<i>Mainstreaming of NRM management into biodiversity conservation landscapes and livelihoods development</i>
Forest Investment Program Laos	SFM	20012-	WB-ADB-IFC funded under Strategic Climate Fund to (i) build institutional capacity, support forest governance and information dissemination; mitigate greenhouse gas (GHG) emissions from the forest sector, including through supporting forest ecosystem services; and (ii) support necessary measures outside of the forest sector to reduce pressure on forests	<i>Collaboration with GEF-5 projects in the recognition of conservation landscapes and application of CC adaptation measures in forestry operations</i>
Thailand				
Tenasserim Biodiversity Conservation Corridors Western Forest Complex - Kaeng Krachan Complex	BD	2005-2008	(i) Restoration and maintenance of ecosystem connectivity; (ii) Capacity building in government staff and local communities; (iii) Clear definition of optimal land uses and harmonized land management regimes; (iv) Sustainable financing mechanism and structures integrated with government planning and budgeting procedures; (v) Poverty alleviation through sustainable use of natural resources and development of livelihoods	<i>Scaling-up and replication at national levels, as envisioned in the project design</i>
Sustainable management of biodiversity in Thailand’s production landscapes – (GEF-4) MONRE & UNDP	BD	2011-2015	Strengthen national capacity for mainstreaming biodiversity into management of ecologically important production landscapes by transforming the supply and market chain of biodiversity based products	<i>Drawing out implications for sustainable utilization of biodiversity</i>
Integrated Community-based Forest and Catchment Management through an Ecosystem Service Approach (CBFCM) – MONRE & UNDP	BD, CC	2011-2015	Create an enabling policy and institutional environment for scaling-up of integrated community-based forest and catchment management (CBFCM) practices through harnessing of innovative financing mechanisms in Thailand	<i>Synergies in development of effective conservation financing mechanisms</i>

Projects	GEF FA	Dates	Project Objectives	Potential 'additionality' from GMS-FBP
Vietnam				
Promotion of Sustainable Forest and Land Management in the Vietnam Uplands – (GEF-3) MARD & IFAD	LD, BD	2010-2015	To promote forest and biodiversity conservation and sustainable forest land management practices in selected districts on Bac Kan Province (Vietnam) by enhancing capacity and improving community livelihoods.	<i>Scale up best practices related to forest biodiversity conservation</i>
Removing Barriers Hindering PA Management in Vietnam – (GEF-4) MONRE & UNDP	BD	2010-2012	The project seeks to develop the legal and policy framework for sustainable PA financing, formulate clear and harmonized institutional mandates and processes for PA financing mechanisms, develop knowledge and experience on sustainable financing options, and enhance information on biodiversity and PA status to assist management and public support.	<i>Build upon institutional framework to expand the use of financing mechanisms</i>
Wildlife consumption in Vietnam: reforming policies and practices to strengthen biodiversity conservation – (GEF-4) MONRE & WB	BD	2011-2014	Strengthen biodiversity in Vietnam through significant reduction of wildlife consumption	<i>Capacity building to facilitate the implementation of policies and practices</i>
Expanding FSC Certification at Landscape-level through Incorporating Additional Eco-system Services - (UNEP)	BD Global	2011-2015	To pilot test expanded and enhanced global and national environmental standards applied to emerging markets for biodiversity conservation and eco-systems services as an initial step for upgrading of successful models of FSC certification. (Global: Vietnam, Chile, Indonesia, Nepal)	<i>Integration of lessons learned with PES in other GMS countries</i>
ADB Biodiversity Corridors Conservation Project in Quang Nam, Quang Tri and Thien Hue Provinces	Multi-focal	2011-2015	(i) Provide forest tenurial security to poor households and ethnic minority groups for collective management of forest resources; (ii) restore habitat on degraded forest lands with tree planting of natives species and agroforestry models with improved sources of non-timber forest products; (iii) improve livelihoods and income enhancing small scale infrastructure; and (iv) generate over 1 million cash-based labor days through project activities.	<i>Coordinate, expand and mainstream conservation measures across the landscape as a whole, including protected areas</i>
Avoidance of deforestation and forest degradation in the border area of southern Laos and central Vietnam for the long term	SFM/REDD	2011-2014	a) to better protect and develop the interconnected conservation areas in Vietnam and Laos through improved control and training and effective Protected Area management; b) to rehabilitate neighbouring forest corridors in Vietnam through afforestation, reforestation and sustainable forest management; c) to introduce	<i>Coordinate, expand and mainstream conservation measures across the landscape as a whole,</i>

Projects	GEF FA	Dates	Project Objectives	Potential ‘additionality’ from GMS-FBP
preservation of carbon sinks (CarBi Project funded by KfW and WWF)			systems which make the timber trade in Vietnam and Laos more transparent and which reduce international leakage in the context of REDD; and d) to train the local administration in REDD mechanisms, the development of a Project Design Project and to assess forests’ carbon reserves and their change over time.	<i>including protected areas</i>
Reduce threats to globally important biodiversity through integrating the findings and tools of ecosystem service assessments in policy and decision making, UNEP	BD Global	2010-2014	Global project to better integrate ecosystem assessment, scenario development and economic valuation of ecosystem services into national sustainable development planning in CEAZA, Chile; CSIR, South Africa and Lesotho; UWI, Trinidad/Tobago; ISPONRE, <u>Vietnam</u>	<i>GMS-PBP will add to the PES experiences and expand lessons from Vietnam project</i>
Myanmar			None: Only NBSAP with GEF fund of US\$220,000	
Regional Projects				
Removing Barriers to Invasive Species Management in Production and Protection Forests in SE Asia, UNEP	BD	2010-2015	To manage SE Asian forests and biodiversity sustainably by reducing negative environmental, economic and human health consequences of Invasive Alien Species	<i>Technical exchange on the role of alien species in landscape conservation</i>
ADB Core Environment Project –Biodiversity Conservation Initiative (CEP-BCI)	BD	2012-2016	Environmental sustainability best practices, safeguards, and climate friendly measures are integrated in selected GMS ECP sector strategies and investment plans, economic corridors and biodiversity conservation corridors and landscapes.	<i>CEP-BCI will be a integral part of the GMS-FBP Regional Project implementation</i>
Critical Ecosystems Partnership Fund – Indo Burma Hotspot	BD	2008 - 2013	Program in China, Vietnam, Thailand, Laos and Cambodia focusing on the Northern Highlands Limestone and the Mekong River and Major Tributaries corridors, 28 key biodiversity areas, 67 animal species and 248 globally threatened plant species.	<i>CEPF update of BD hotspots will be supplemented by priority landscape habitat and species profiling by CEP-BCI and the GMS-FBP Regional Project</i>
World Bank, Global Tiger Initiative	BD	2008 – Global	Tiger recovery plans in GMS - support capacity-building, curtail international demand; develop mechanisms for safeguarding habitats from development; create innovative and sustainable financing mechanisms; build strong local constituencies for tiger conservation;	<i>Collaboration on habitat protection and conservation</i>

Projects	GEF FA	Dates	Project Objectives	Potential 'additionality' from GMS-FBP
Adaptive Program Lending for Strengthening regional cooperation for wildlife protection in Asia (Phase 1: Bangladesh, Nepal, and Vietnam, Laos and Bhutan)	BD	2011-	<p>recognize tiger habitats as high-value diverse ecosystems.</p> <p>(1) Capacity building for addressing the illegal trans-boundary wildlife trade: (i) institutional strengthening in wildlife conservation and illegal wildlife trade control, and (ii) staff capacity building and training towards regional collaboration; (2) Promoting wildlife conservation in South Asia, through: (i) a virtual centre of excellence for wildlife conservation; and (ii) protected area management; and (3) Project coordination and communication, which includes dealing with the demand side management of trade, plus project management.</p>	<p><i>Increased partnerships, networks and knowledge sharing on illegal trade issues between countries</i></p>

Note: This list does not include many bilateral projects related to forests and biodiversity

Annex A-5: Project Concept Notes

GEF Agency	Country	Project Title	Notes
AsDB	Regional: Cambodia, Lao PDR, Myanmar, PRC, Thailand, Viet Nam	GMS Forests and Biodiversity Regional Support Project	PIF to be submitted for November 2011 Work Program <i>(See PIF for Details)</i>
World Bank	Lao PDR	Strengthening Protection and Management Effectiveness for Wildlife and Protected Areas	PIF to be submitted for November 2011 Work Program <i>(See PIF for Details)</i>
World Bank	Thailand	Strengthening Capacity and Incentives for Wildlife Conservation in the Western Forest Complex.	PIF to be submitted for November 2011 Work Program <i>(See PIF for Details)</i>
AsDB	Viet Nam	Integrating Conservation, Climate Change and Sustainable Forest Management in the Central Annamites Landscape of Vietnam	PIF to be submitted for June 2012 Work Program <i>(See below Concept Note for detail – page 21)</i>
AsDB	Cambodia	Watershed Management and Ecosystem Services in the Cardamom Mountains Upland of Prek Thnot River	PIF to be submitted for June 2012 Work Program <i>(See below Concept Note for detail – page 26s)</i>

Annex A5.1
Project Summary – Cambodia (AsDB)

GMS Forests and Biodiversity Program:
Watershed management and ecosystem services in the Cardamom Mountains uplands of
Prek Thnot River

To be submitted for June 2012 Work Program by: Asian Development Bank and Ministry of
Agriculture, Forests and Fisheries, Royal Government of Cambodia

*This note is intended as input for development of a GEF project proposal by MAFF to be submitted
under the ADB-WB GMS Forest and Biodiversity Program. This project is seeking funding from Land
Degradation (\$1.2M) of the GEF 5 allocation for Cambodia.*

September 15, 2011

Background

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 the agricultural landscape. Two immediate causes of the problem were highlighted: a) Low Farm level soil fertility and b) Reduced ecological services from forest lands to support the needs of the agriculture sector. As part of this analysis, the NAP identifies two strategic objectives¹:

- SO1: Enable widespread adoption of on- farm soil management and related practices to address land degradation and adapt to climate change.
- SO2 : Enable stakeholders to help restore watershed & forest ecological services that improve and sustain agricultural productivity.

The NAP describes the role of these two critical issues:

***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. Inappropriate fertilization practices both in lowlands and uplands cause soil acidification and does not actually alleviate the inherent low soil fertility situation.*

***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 unable to effectively control water runoff and promote water retention. Existing information indicate that 44 % of the total land area are either*

¹ Additionally, the NAP has the following supportive objectives: support to policy reform dialogue; human resources management and resource mobilization for sustainable land management (SLM). The NAP is due for final approval by the Royal Government of Cambodia within 2011.

moderately to highly vulnerable to soil erosion. The decline of tree cover appears to affect rainfall intensity and temperature on a regional scale.

Deforestation (at 0.5 % per annum) is believed to have reduced the ecological services that watersheds can provide to agriculture. There are at least two major reasons. These are largely unregulated demand for trees and fuel wood while the current pace of reforestation and forest restoration efforts cannot catch up with the deforestation rate.²

The relationship between watershed management, lowland agriculture, climate change and biodiversity loss is a key theme in the NAP. Upland deforestation and degradation along with climate change exacerbate the intensity of floods and droughts, which affect agricultural productivity and food security. Decline of biodiversity due in turn to forest decline also affect the stability and sustainability of agriculture.

One of the priority watersheds that display high vulnerability to land and water management issues is the Prek Thnot River located primarily in Kampong Speu province with its headwaters in eastern Koh Kong province.³ In a 2004 MRC survey it was included in the highest category for 'Risk of Impairment of Watershed Functions' largely due to poor forest and land management practices in the forested uplands.

The ADB *Biodiversity Conservation Corridors Project (BCC)*, covering both Mondulhiri and Koh Kong (within the southern Cardamom landscape) is endeavoring to (i) provide forest tenurial security to poor households and indigenous groups for collective management of forest resources; (ii) restore habitat on degraded forest lands with tree planting of natives species and agroforestry models with improved sources of non-timber forest products; and (iii) improve livelihoods and income enhancing small scale infrastructure.

This will generate over 1 million cash-based labor days through project activities. In Koh Kong province, the Project will maintain and consolidate forest ecosystem connectivity in 10 communes between the Central and Southern Cardamom Protected Forests, linking Botum Sakor National Park, the Peam Kasop Wildlife Sanctuary and the Dong Peng multiple use area to the corridor using a multipurpose, sustainable, biodiversity landscapes approach.⁴ Additionally, the recent endorsement of Cambodia's Strategic Program for Climate Resilience (SPCR)⁵ provides grant funding for climate change adaptation activities (infrastructure and mangrove rehabilitation) in coastal communes of Koh Kong under the BCC Project⁶.

The BCC Project in the Cardamoms (est. \$7.5 mill budget from a total of \$19 million excluding leveraging of climate change adaptation funding under SPCR) and the proposed GEF project provide an opportunity to facilitate synergy among initiatives that represent the concerns of 3 major UN

² Royal Government of Cambodia, Draft NAP, 2011.

³ Theng Tara, Le Huu Ti, Thierry Facon, *National Water Vision to Action for the Kingdom of Cambodia*, 2004.

⁴ ADB, Project Administration Manual, Kingdom of Cambodia: Greater Mekong Subregion Biodiversity Conservation Corridors Project Nov 2010.

⁵ Endorsement Letter addressed to HE Keat Chon, Deputy Prime Minister, Minister of Economy and Finance by the Administrative Unit of the Climate Investment Funds, dated August 3, 2011

⁶ Preliminary estimates at an additional \$8 million (Source ADB)

conventions supported by GEF. These initiatives are the piloting of the National Action Plan to Combat desertification or NAP in one watershed (UNCCD); as well as the proposed actions on biodiversity conservation under the BCC (CBD) and climate change adaptation (UNFCCC) in the same area

This will be achieved through a strategic relationship in the implementation of a landscape and watershed based approach in Cambodia. The main focus will be on forest and biodiversity conservation and watershed rehabilitation in critical portions of the watershed and tracking their effects on downstream conditions. This proposed relationship includes jointly promoting landscape connectivity across the southern Cardamoms; cooperation on landscape level biodiversity conservation that links land, water, ecosystem management and climate change adaptation; and synergies and efficiencies in building capacity and demonstrating the landscape and watershed approaches.

The purpose of the proposed GEF project, in the context of the GMS Forests and Biodiversity Program, is to demonstrate the potential for forest and biodiversity conservation, climate change adaptation and sustainable livelihoods development in the upper reaches of a watershed, to have a significant beneficial impact on landscape level land and forest conservation and management as well as downstream agricultural productivity.

It will include a range of measures to enhance forest cover and watershed processes and integrate biodiversity safeguards / objectives and climate resilience through collaborative watershed rehabilitation and management by local authorities, communities and the agri-business sectors that rely on landscape level resources

In addition to supporting the GMS Forests and Biodiversity Program, this GEF project serves as the immediate start up phase of the National Action Plan to combat desertification. The NAP seeks to demonstrate how to restore ecosystems services to agriculture through efforts in forest protection and biodiversity conservation, combined with targeted climate adaptation measures.

By engaging stakeholders in the agriculture and other downstream sectors through a watershed sensitive planning and management process, the NAP seeks to broaden the stakeholder base for the forest and biodiversity conservation efforts. The experience in this project will guide the full blown, nationwide implementation of the NAP.

Project Area

The Prek Thnot River originates from the 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.

Figure 1. Map of BCC / SLM Project area with watersheds

Large rice production occurs in the middle and downstream reaches of the basin. Rice is cultivated depending on the rainfall (rainfed) and has low productivity and unstable production. At the downstream, 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. Figure 1 provides a perspective of the adjoining watersheds.

The watershed is known to face problems related to (a) continual logging (including fuel wood production) in Aural Wildlife Sanctuary, Cardamom Protected Forest and associated highlands of the

watershed, (b) drought and flooding events in the lowlands, (c) sedimentation of irrigation canals, (d) low to medium soil fertility, and (e) poor soil management practices in the Economic Land Concessions. The proposed project area includes the upper reaches of the Prek Thnot watershed in the vicinity of the height of land between Koh Kong and Kampong Speu provinces downstream to the middle reaches of the basin. The geographic scope will be further refined by MAFF.

A draft concept paper that was prepared as part of the NAP states:

Healthy watersheds provide ecological services to agriculture such as the mitigation of water run-off and sedimentation; and the recharging of ground water reservoirs, among others. The presence of forests and other vegetative cover in the watersheds make these ecological services to agriculture possible. In Prek Thnot, these watershed functions are deteriorating, and continue to be threatened daily. The evidence is the sedimentation rate of the various streams and rivers and irrigation canals where the watershed drains into. These have also tended to worsen flooding events during wet season (leading to farm field destruction). At the same time this reduces water availability during the dry season. Unfortunately the pace of efforts to protect the forests in the watersheds (e.g.: Community Forestry, CPA) and regenerate deforested areas (e.g.: reforestation) are unable to catch up with the rate of forest loss. At the same time, agricultural practices (small farmers and portions of ELCs) contribute to soil erosion and eventually sedimentation which affects farms yields particularly in the lowland areas.

Project Objective

The primary objective is to restore and maintain forest cover and watershed stability and functions while providing for sustainable livelihoods development, biodiversity conservation, climate change adaptation and ecosystem services in the upper section of the Prek Thnot watershed.

Watershed stability and functions include maintaining stream flow, regulating sediment transport and channel integrity within the natural range of variability of the hydrological processes of the unaltered watershed.

The project design could be organized through four primary components and related outcomes:

- 1. Soil and water conservation that reduces stream runoff, soil erosion and sedimentation and increases water balance thereby improving resilience to impacts of climate change .**
- 2. Afforestation, agroforestry, integrated farming and soil management that provides for increased forest and agricultural productivity and sustainability.**
- 3. Habitat conservation and rehabilitation that strategically maintains landscape connectivity and life cycle requirements for targeted wildlife species and biodiversity important for the productivity of forests, agriculture and water bodies.**
- 4. Watershed management institutional development that promotes collaboration between local authorities , communities and the agribusiness sector and technical agencies for watershed management , climate change adaptation and biodiversity conservation. This will also include capacity building for targeted technical services that support local initiatives**

There are a range of land and water management interventions that could be applied through the project, such as:

- catchment treatments (contour bunds, check dams, vegetative barriers, etc.)

- rainwater harvesting and related drainage controls
- conservation tillage and green manure techniques
- integrated farming methods and agro biodiversity conservation and use
- modification to shifting cultivation practices
- assisted natural regeneration, community forest plantation and agroforestry
- sustainable use of non timber forest products through value addition
- alternative energy to reduce fuel wood harvesting
- habitat enhancements and wildlife management
- other ecosystem based climate change adaptation measures

These activities are expected to be implemented within a collaborative framework with GEF funding to be used for demonstrative / pilot activities and supporting capacity building.

Such technical measures will be complemented by innovative institutional approaches such as

- Collaborative landscape and watershed management planning among national and local government agencies and stakeholders as basis for agency- level investment programming
- improvements in capacity of technical organizations (government and non government) to conduct climate change vulnerability assessments and support local land and water decision making based on landscape and watershed plans
- Partnership building with agribusiness operations (who control large pockets of land that need to be stabilized) to ensure enforcement and compliance of SLM rules in large areas of agribusiness lands.

GEF Focal Area Objectives Consistency

The project will support the following GEF 5 focal area objectives:

LD-3

Outcome 3.1: Enhanced cross-sector enabling environment for integrated landscape management

Outcome 3.2: Integrated landscape management practices adopted by local communities

Outcome 3.3: Increased investments in integrated landscape management

Draft Results Framework

<i>Components</i>	<i>Outcomes</i>	<i>Indicators</i>	<i>Indicative Outputs</i>
Soil and water conservation	<ul style="list-style-type: none"> • Reduced rate of soil erosion • Reduced peak flows and range of seasonal flow variability • Increased resilience to climate change effects on stream flows and sedimentation 	<ul style="list-style-type: none"> ▪ Soil loss estimates from representative reaches of the sub-basins ▪ Monthly stream flow measurements at designated hydrometric stations ▪ Sediment load and transport estimates in representative reaches of the sub-basin ▪ Rating of climate change vulnerability of 	<ul style="list-style-type: none"> ▪ Hydrological assessment ▪ Watershed rehabilitation and management assessment of sub-basins ▪ Climate change vulnerability assessment and adaptation measures ▪ Catchment area

		sub-basin ecosystems	<ul style="list-style-type: none"> ▪ treatments ▪ River bank eco stabilization ▪ Rainwater harvesting and small scale irrigation
Afforestation, agroforestry, integrated farming and soil management	<ul style="list-style-type: none"> • Increased forest cover and complexity • Increased agricultural production from agroforestry, integrated farming and soil management by both small farmers and responsible agribusiness operators 	<ul style="list-style-type: none"> ▪ Area of forest plantation Area of forest protection and natural regeneration Area under agroforestry ▪ No. of integrated farming operations ▪ Area under conservation farming practices ▪ Farm household incomes associated with improved practices ▪ Partner-agribusiness firms (ELCs) adopting sustainable land management in plantation operations 	<ul style="list-style-type: none"> ▪ Forest management and protection plans and programs ▪ Forest regeneration and enhancement measures ▪ Community forest plantations ▪ Agro-ecosystem analysis ▪ Agroforestry campaign ▪ Integrated farming campaign ▪ Soil management campaign programs ▪ SLM partnership programs and SLM Enforcement campaigns among ELC operators ▪ Watershed plans upon which above programs (soil and forests) are based
Watershed management institutional development	<ul style="list-style-type: none"> • Increased local authority and community awareness and participation in watershed rehabilitation and management • Sustainable community based institutions with local authority support, are established to support upper micro-watershed 	<ul style="list-style-type: none"> ▪ No. of local stakeholder organizations (e.g. community watershed committees; urban based river protection movements, business contributions) are engaged in watershed rehab. and management ▪ Self sustainability of community organisations ▪ No. of communes with watershed rehabilitation and management measures incorporated into local development 	<ul style="list-style-type: none"> ▪ Participatory watershed planning events ▪ Commonly agreed watershed plans ▪ Community org. capacity building ▪ Commonly agreed rules and guidelines for land and water use within the watershed ▪ Community mobilization and awareness bldg

	management as well as other key portions of the watershed	<ul style="list-style-type: none"> ▪ and investment plans ▪ No. of national agencies with interventions that are based on a watershed plan commonly agreed with other national and local agencies ▪ No. of events and knowledge products that systematically share experience among local stakeholders and between watersheds 	<ul style="list-style-type: none"> ▪ Micro-finance for community based watershed rehab and management ▪ Commune dev plans environmental mainstreaming ▪ Ecosystem services comparative valuation from watershed rehabilitation
Project Management	<ul style="list-style-type: none"> • Effective and efficient project management and reporting 	<ul style="list-style-type: none"> ▪ Quality and timeliness of outputs completed ▪ Adaptive management actions ▪ Quality of monitoring reports ▪ Financial audit results 	<ul style="list-style-type: none"> ▪ Project implementation unit ▪ Project mangnt committee ▪ Local authority and Community implementation agreements

Biodiversity Conservation Corridors (BCC) Project Linkages and Cofinancing

BCC in Cambodia is a \$19 million project in Koh Kong and Mondulhiri provinces directed at corridor planning, forest restoration and protection, livelihoods improvement, and small scale infrastructure subprojects, capacity building, project management and consulting services. Beneficiaries will contribute their labor to agroforestry, NTFP planting, and in-kind contribution to routine maintenance small-scale infrastructure. The estimated co-financing is \$ 7.5 M.

The proposed GEF project will provide incremental GEF benefits to the baseline BCC project by expanding the forest cover and landscape connectivity in southern Cardamoms. It will demonstrate integrated GEF focal area objectives through collaborative watershed rehabilitation, scaling up BCC activities, and providing opportunities to apply ecosystem based climate change adaptation and ecosystem services valuation to watershed management. This is expected to enhance the productivity , stability and sustainability of forests and agricultural lands and the biodiversity therein in support of the NSDP.

CEP-BCI Project Linkages and Cofinancing

The GMS Core Environment Program – Biodiversity Conservation Corridors Initiative is a proposed second phase (2012-2016) of the ADB-funded regional CEP-BCI program that aims to achieve improved biodiversity conservation and climate resilience across the GMS by mainstreaming environment friendly and climate resilient activities in the GMS Economic Cooperation Program. Technical support will be provided to prevent or reverse the fragmentation of high-value forest ecosystems through improved planning and investment decision-making processes in close collaboration with the Biodiversity Conservation Corridors (BCC) subregional investment program. The estimated co-financing is \$ 1M.

The proposed GEF project will provide incremental GEF benefits to the baseline CEP-BCI project by effectively utilizing biodiversity landscape profile data in a watershed rehabilitation context, further establishing the biodiversity corridors in the southern Cardamoms, expanding the capacity of national and local institutions in biodiversity conservation and sustainable land management , and testing the concepts and methods being promoted by CEP-BCI to facilitate lessons learned and regional best practices.

Suggested Implementation Strategy

The project organization will be developed by MAFF, building on the experience and lessons learned in land and water governance. A locally based, geographic sub-basin approach is suggested with a focus on intensive and sustained treatment of the upper river basin and micro watershed sub-units. Where deemed necessary, key constraints at the lower river basin that contribute to overall watershed decline will also be addressed (e.g. Sand mining, river protection , solid waste management irrigation management etc). GEF funds will be primarily used to catalyze the harmonization and subsequently more cost-effective use of available and pipeline resources (line agencies, local authorities, NGO, donor) through collaborative planning. This planning process will build on the relevant approaches initiated by MAFF (e.g. collaborative watershed management) and ADB (e.g. IWRM, Biodiversity corridors) in previous and on-going programs. This could be linked to the government's policy commitment to Decentralization and Deconcentration and efforts to enhance capacity of local authorities to promote natural resources management including watershed protection and rehabilitation. The institutional development component should include mainstreaming of land and water management strategies into the local development processes and investments.

Valuation of ecosystem services from watershed rehabilitation and management is also included in the project concept proposal with technical support envisioned from CEP-BCI. These services could include flood control, forest and agricultural production and productivity, climate resilience (reduced vulnerability) and hydroelectricity flows.

The proposed general sequence is:

Year 1 – Mobilizing national and local stakeholders including local authorities, community user groups, NGO support groups, and local agri-business sectors; introduction and testing of interventions and developing locally initiated sub-basin management plans. These plans will aim to guide both short and long term plans of local authorities and line agencies that depend on or are affected by the watershed. Project resources will be used to leverage the development and implementation of relevant plans and field activities by these institutions

Year 2/3 – Implementation of activity plans to demonstrate efficacy of the planned best practice interventions and to develop capacity of stakeholder organizations including, local authorities and, community organizations;

Year 4/6 – Compilation of lessons learned, dissemination of successful interventions and strengthening sustainability of partnerships between community watershed/forest management organisations and local authorities with support from line agencies .

Indicative Component Budget

<i>\$USD</i> <i>Components</i>	<i>GEF Trust Fund</i>		<i>Co-financing</i>		<i>Total</i>
	<i>LD</i>	<i>Total</i>	<i>RGC</i>	<i>ADB</i>	
Soil and water conservation	370,000	370,000	50,000	500,000	920,000
Afforestation, agroforestry, integrated farming and soil management	370,000	370,000	50,000	1,000,000	1,420,000
Habitat conservation and rehabilitation	170,840	170,840	50,000	1,800,000	2,020,840
Watershed management institutional development	97,564	97,564	50,000	1,000,000	1,147,564
Project Management Cost	100,840	100,840	100,000	200,000	400,840
Totals		1,109,244	300,000	4,500,000	5,909,244

GEF Funding Request

<i>Source</i>	<i>Type & FA</i>	<i>GEF grant</i>	<i>Agency fee</i>	<i>Total GEF</i>
GEF Trust Fund	Grant – Land Degradation	1,109,244	90,756	1,200,000

*Amount includes Project Management Costs and GEF Agency Fees

Co-finance Summary

<i>Source</i>	<i>Type</i>			<i>Total Amount</i>
Asian Development Bank	Grant			4,500,000
Royal Government of Cambodia	Cash/in-kind			300,000
Total				4,800,000

*Amount includes Project Management Costs and GEF Agency Fees

Annex A6.2
Project Summary – Viet Nam (AsDB)
GMS Forests and Biodiversity Program

**Integrating Conservation, Climate Change and Sustainable Forest Management in the
Central Annamites Landscape of Viet Nam**

To be submitted for June 2012 Work Program by: ADB and Ministry of Agriculture and Rural
Development, Ministry of Natural Resources and Environment, Vietnam (subject to final endorsement
of the PIF)

1. **Title:** *Integrating Conservation, Climate Change and Sustainable Forest Management in the Central Annamites Landscape of Vietnam*
2. **Objective:** To maintain and restore forest biodiversity, ecosystems and related watershed processes and to maintain and enhance forest carbon stocks and strengthen climate resilience at a landscape scale in the Central Annamites of Viet Nam.
3. **Outcomes**

Component 1: Institutional development for protected area, conservation corridor and sustainable forest and land management.

1.1 PA, commune, district and provincial authorities have adopted sustainable forest and land management (SFM) best practices, climate change adaptation and biodiversity conservation measures in PA management plans and local development plans and are actively promoting their implementation.

1.2 Coordination mechanisms between PA, commune, district and provincial authorities are established for sustainable forest and land management and biodiversity conservation in the Central Annamites.

1.3 Increased capacity of protected area staff and conservation corridors stakeholders to increase landscape connectivity and improve forest biodiversity.

Component 2: Forest and watershed rehabilitation and restoration.

2.1 Reduced rates of deforestation, forest degradation and soil erosion through the application of good management practices for LULUCF with forest lands and in the wider landscape with a focus on integrated sustainable forest, land and watershed management.

2.2 Restoration and enhancement of carbon stocks in forest landscapes and protected areas, integrating biodiversity and ecosystem service provisions and benefits sharing mechanisms for local communities.

2.3 Increased habitat connectivity and improved forest biodiversity at landscape level, quantity and quality of habitats for key species, e.g. through buffer zone management, corridors between PAs, and inclusion of forest biodiversity aspects into production forest.

Component 3: Sustainable livelihoods development.

3.1 Local communities are utilizing protected and rehabilitated forests and watersheds as sources of sustainable livelihoods, food security and poverty reduction.

3.2 Local communities are demonstrating a commitment toward biodiversity conservation and climate resilient livelihoods.

3.3. Integrated landscape management practices adopted by local communities.

Component 4: Policies, knowledge and sustainable financing.

- 4.1 Project experiences on sustainable forest management and landscape conservation disseminated within Vietnam and regionally through the GMS FBP.
- 4.2 The principles and mechanisms for the application of a 'no net loss' policy in forest protection and management are established.
- 4.3 Forest carbon stock and biodiversity monitoring system established in the Central Annamites.
- 4.4 Forest and watershed conservation measures sustainably financed through payment for ecosystem service models in the Central Annamites.

4. Rationale

The project seeks to maintain and restore forest carbon stocks, biodiversity and watershed processes by developing the institutional mechanisms for landscape conservation, strengthening PAs, commune/district conservation management capacities, and demonstrating community involvement in SFM biodiversity conservation, climate change adaptation, forest and watershed rehabilitation and livelihoods development that support this objective.

The current piecemeal approach to biodiversity conservation, sustainable forest management (SFM), climate change adaptation and watershed management in Central Annamites is constrained by a lack of institutional mechanisms (including inter-sectoral coordination processes), management capacity and financial resources to effectively address the pressures of development on the environment. This is further hindered by the divisions between ministries, donors and development sectors. A landscape approach offers the opportunity to integrate, spatially and thematically, many of these environmental objectives. In the Central Annamites the key focus has been on establishing a 'green corridor' within a large scale conservation landscape bordering Vietnam and Laos. However, there are substantial gaps in the capacity of the PA authorities, the management mechanisms for landscape conservation with commune, district and provincial authorities, the means of integrating biodiversity safeguards and habitat complexity and connectivity into SFM, and the engagement of local communities in conservation practices.

The proposed project aims to provide a more comprehensive landscape-wide approach that will link PAs, buffer zones and conservation corridors in a joint effort to address priority forest management and conservation issues as well as climate change risks to biodiversity and ecosystems. This includes policy and institutional development for SFM, landscape conservation and climate resilience. It will (i) improve the management capacity of forest protection and protected areas authorities, (ii) develop policy frameworks and co-management mechanisms; and (iii) support forest rehabilitation/restoration opportunities; and (iv) expand sustainable livelihoods that complement conservation objectives.

The project will build upon the lessons learned from previous projects in the Central Annamites by combining forest management objectives under a comprehensive approach to landscape conservation and the connectivity of key habitats across international borders. It will provide a link between protected area management, production forestry and small holder agroforestry that will protect and enhance forest carbon stocks, reduce forest degradation, and improve habitat complexity. The project will complement the previous projects in the area funded under the Vietnam Conservation Fund by providing a more integrated (biodiversity/watershed management/climate change adaptation) and spatially comprehensive approach to landscape management.

The project will fill a strategic geographic gap in the Central Annamites landscape between the KfW-funded project "*Avoidance of deforestation and forest degradation in the border area of southern Laos and central Vietnam for the long term preservation of carbon sinks*" (CarBi Project) which is focusing on the east-west conservation corridor between Vietnam and Laos, and the *ADB-funded Biodiversity Corridors Conservation Project* (ADB-BCC) which is focusing on the north-south corridor outside of the PAs. It will also synergize with other projects such as the WWF-IKEA Promoting Responsible

Forest Management and Restoration in Vietnam; and UNEP/GEF Expanding FSC Certification at Landscape Level through incorporating additional eco-system services. In coordination with these, the additional GEF support will fill gaps in existing support, thereby providing an integrated landscape approach across the whole of the Central Annamites.

The proposed project area is located within the Annamite mountain range – an important carbon sink – and covers six protected areas and the forest and agricultural landscapes between them. This includes: (i) North Huong Hoa Nature Reserve, (ii) Hochiminh Pass, and (iii) Dakrong Nature Reserve (in Quang tri Province), (iv) Phong Dien (in Thua Thien Hue Province), (v) Song Thanh Nature Reserve (in Quang Nam), and (vi) Ngoc Linh Nature Reserve on both sides of Quang Nam and Kon Tum Provinces as shown on the map below.

Figure 1 shows the red coloured east-west CarBI Project area, the green coloured north-south ADB-BCC corridor project area, and the grey coloured protected areas to the north and south of these other project areas that will be the primary focus of the proposed GEF project. In addition to these protected areas shown in Figure 1, the project will also undertake similar interventions in selected sites in Quang Binh Province on the north boundary of Central Annamites in order to address significant, high priority forest and watershed degradation issues that are a priority of the government.

The Central Annamite conservation landscape (**Figure 2**), is a subset of the Forest of the Lower Mekong Ecoregion Complex (FMEC) which represents all non-marine and non-estuarine parts of Laos, Cambodia and Vietnam. The Central Annamite conservation landscape is defined using geomorphological boundaries within the greater Annamites Global 200 Ecoregion of FMEC. It generally encompasses the central section of the main Annamite mountain chain, together with associated foothills.

The Central Annamite landscape is in essence a spatial representation of the full range of biodiversity and biological process necessary to promote the long-term survival of all taxa within the priority landscape. The landscape is zoned according to conservation priority into core zones, habitat corridors and transition zones.

The Central Annamite conservation landscape extends from Laos in the west into central Vietnam where it transects eight provinces: Quang Tri, Thua Thien Hue, Da Nang, Quang Nam, Quang Ngai, Binh Dinh, Kon Tum and Gia Lai. The landscape geomorphology crosses many district boundaries (65), and transects individual communes (821). The Central Annamite communes are predominantly in upland areas, with some communes in the eastern “transition zones” located in the foothills and plains (Table 1).

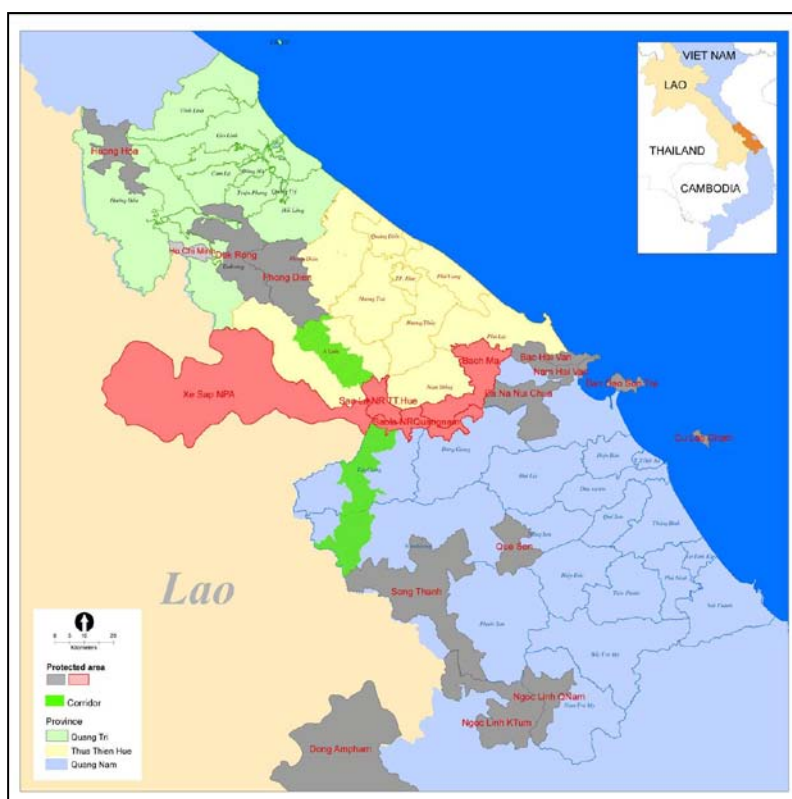


Figure 1: Central Annamites Protected Areas and Conservation Corridors

Table 1. Key information on the Central Annamite provinces⁷

Province	No. of District	No. of Commune	Population	Total area (km ²)	Agriculture (km ²)	Forestry (km ²)	Specialized (km ²)	Resident(km ²)
Quang Tri	10	117	633,075	477.7	79.6	219.6	14.8	7.1
Thua Thien Hue	8	119	1.087.579	5.065,3	55.4	289.1	20.9	16.0
Da Nang	8	66	890,000	128	8.7	6.7.8	39.2	5.8
Quang Nam	16	210	1.423.537	1,043	110.7	566.0	29.8	20.9
Quang Ngai	13	150	1.216.773	5,153	125.7	262.8	18.1	9.4
Binh Dinh	10	159	1.489.900	604.0	138.1	259.2	25.3	7.8

Some sub-area landscapes in Central Annamite were identified as potentially globally significant. **Figure 2** shows the priority conservation areas in Central Annamites including the protected areas and the conservation corridors. These are considered nationally as well as globally significant for

⁷ Data as of 31st December 2009

biodiversity conservation. The proposed project will address issues primarily in the Priority 1 areas but it will also support development of the management framework for the landscape as a whole.

The Central Annamite forests comprise some of the most unique and diverse biodiversity within the Mekong region. The area hosts considerable biodiversity traversing an ecological range that includes the evergreen wetter forests in Vietnam, extended to the drier parts of the eastern slopes of the Annamite chain. The Central Annamites is an area known to be as a Pleistocene refugia, i.e. an area that has existed as continual forest despite the previous climatic fluctuations of the past. This has encouraged high degrees of speciation and endemism, highlighted by the discovery of three large mammals (the saola, a unique forest species, and two muntjac species, a type of deer) in the late 1990s, a feat that has not been encountered anywhere else in the last hundred years. The Central Annamites landscape is regarded as one of the most critical conservation priorities in the SE Asia by international scientists. It supports a large number of endemic species including recent discoveries from lizards, snakes, orchids and mammals. In addition to this, the forests have enormous socio-economic wealth, supporting watersheds, provide community incomes, and are home to over 30 different ethnic peoples. (WWF website)

The Greater Annamites ecoregion is subdivided into three sub-ecoregions, each of which comprises a number of Priority Landscapes. These are the North, Central and Southern Annamites. The Central Annamite conservation landscape (Figure 1) is a subset of the Forest of the Lower Mekong Ecoregion Complex (FMEC) which represents all non-marine and non-estuarine parts of Laos, Cambodia and Vietnam. The Central Annamite conservation landscape is defined using geomorphological boundaries within the greater Annamites Global 200 Ecoregion of FMEC. In principle, it encompasses the central section of the main Annamite chain, together with associated foothills.

The Central Annamite landscape is in essence a spatial representation of the full range of biodiversity and biological process necessary to promote the long-term survival of all taxa within the priority landscape. The landscape is zoned according to conservation priority into core zones, habitat corridors and transition zones.

The Central Annamite conservation landscape extends from Laos in the West into central Vietnam where it transects eight provinces: Quang Tri, Thua Thien Hue, Da Nang, Quang Nam, Quang Ngai, Binh Dinh, Kon Tum and Gia Lai. Geomorphology paid equally little respect to district boundaries (65), and even transverses individual communes (821). The Central Annamite communes are predominantly in upland areas, with some communes in the eastern “transition zones” located in the foothills and plains (Table 1).

The area consists of many deforested and degraded areas which are the central focus of the proposed project. In these areas the project will focus on forest restoration, livelihoods and income generation, carbon storage, and improving landscape connectivity.

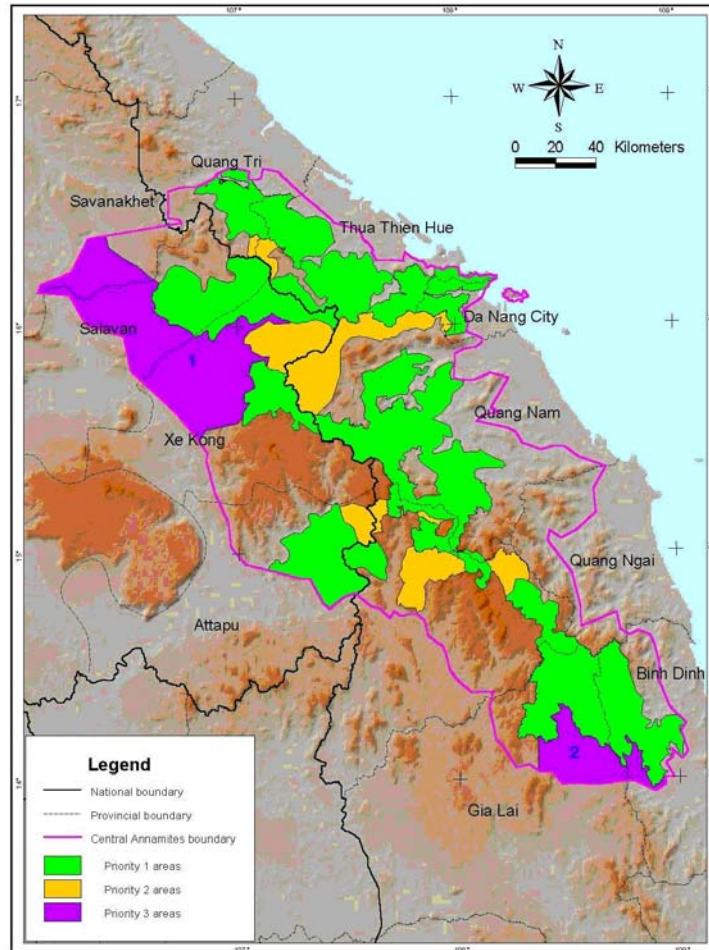


Figure 2: Priority conservation areas of Central Annamite

Key results to be supported by the project

- Reduced rate of forest habitat loss and fragmentation due to development pressures.
- Reduced forest and watershed degradation that adversely affects forest carbon stocks, biodiversity and ecosystem values.
- Increased forest rehabilitation that increases carbon sequestration and improves biodiversity benefits (including protection of for species of national/global significance) through afforestation schemes and forest management strategies, including the potential for implementation of the ‘Analog Forestry’ model.
- Improved policy and planning framework for landscape conservation in Vietnam, including the mainstreaming of biodiversity and ecosystem services provisions and their importance for sustainable livelihoods at a landscape scale.
- Improved institutional mechanisms to integrate biodiversity conservation, climate change adaptation and sustainable forest management at a landscape scale.
- Strengthening the management and governance of PAs and buffer zones to improve local support for conservation and sustainable utilization of biodiversity.
- Improved patrolling and enforcement of protected area, resulting in reduced wildlife poaching and illegal wildlife and timber trade.
- Strengthened trans-boundary cooperation between Vietnam and Laos on landscape conservation and illegal trade.

5. Linkage to national strategies and priorities

The project supports one of the priority areas of the *Viet Nam National Portfolio Formulation Exercise for GEF -5* on “supporting sustainable forest management in production landscapes”, working to avoid the degradation of forests, forest margins and further forest fragmentation caused by agriculture, logging and unsustainable harvesting of fuel wood.

With regards to biodiversity, the project is consistent with the *National Action Plan on Biodiversity*, which specifies objectives to 2020: a) to conserve, develop and sustainable use the rich and unique biodiversity of genetic resources, biological species and ecological system; b) to complete the organizational system, mechanisms, policies and legal documents on biodiversity and bio-safety management; and c) to complete the system of protected areas; to restore 50% of natural, typical and sensitive ecosystems which have been destroyed.

The project will also support the *Forestry Development Strategy (FSD) 2006-2020* which aims to: sustainably establish, manage, protect, and utilize 16.24 million ha of forest land, to increase the ratio of land with forest up to 43% by 2010 and to 47% by 2020; to ensure wide participation from various economic and social sectors in forestry; to increase their contributions to socioeconomic development, environmental protection, biodiversity conservation and environmental services supply, as well as to reduce poverty and improve the livelihood of rural mountainous people. The Strategy sets tasks, inter alia, to increase incomes from forest environmental services through Clean Development Mechanism (CDM), ecotourism, and other services such as erosion control and water protection to USD 2 billion by 2020, and to get at least 30% of production forests certified for SFM. The project will also provide targeted inputs to support the *National REDD Strategy* and will assist the Vietnam Forestry Development Strategy and Vision to 2020 which has SFM as one of the five priority program areas. The priorities related to LULUCF under the *Second National Communication (UNFCCC)* including CO₂ sequestration from Change in Forest and Other Woody Biomass Stocks, CO₂ emissions from soils, CO₂ removal from Abandonment of Managed Lands and CH₄ emissions from Forest and Grassland Conversion will be assisted by the program.

With regards to Land degradation, the project is consistent with the UNCCD NAP of Viet Nam, which identifies Enabling Programmes including: 1: Survey and assessment of affected areas (2002-2005), 2: Strengthen legal framework on natural resources sustainable management (2002-2010); 3: Strengthen international cooperation, information exchange, training and education (2002-2020); and Implementing Programmes including: 1: Develop advanced science and technology based on traditional knowledge promotion (2002-2020); 2: Protect forests and increase green cover (2002-2010); 3: Improve water resources, limit impacts of drought and disasters (2002-2010); and 4: Poverty alleviation (2002-2010).

6. Linkage to GEF strategic objectives

The Project will contribute directly to the following GEF focal areas:

(a) **Biodiversity (BD1 & B2):** The project will by strengthening the management effectiveness of 6 protected areas in the Central Annamites and establishing sustainable financing plans and PES mechanisms; and mainstreaming biodiversity conservation in production landscapes; and by integrating landscape conservation, biodiversity protection, sustainable forest management and climate change resilience into policy, planning and regulatory frameworks in the project areas.

(b) **Climate Change Mitigation (CCM-5):** The project will support efforts to conserve and enhance carbon stocks through sustainable management of land use, land-use change, and forestry (LULUCF). It will prevent GHG emissions by reducing forest deforestation and forest degradation pressures on forest lands in the wider landscape of the Central Annamites. It will do this through: (i) efforts to improve policy and planning framework in the project area including the integration of good practice sustainable forest and land management considerations and biodiversity conservation within land use

plans and sectors plans; (ii) improving protected areas management effectiveness (linked to BD1 above); and (iii) developing capacity of forest management and protected areas authorities and local communities to design and apply sustainable forest management. In addition, the project will support restoration and enhancement of carbon stocks in forest landscapes. This will include a mixture of reforestation, natural regeneration and enrichment planting, forest protection contracts with the local population, as well as community-based forest management. In addition, these approaches will seek to integrate biodiversity and ecosystem service provisions and benefits sharing mechanisms for local communities.

(c) **Sustainable Forest Management (SFM/REDD+ 1 & 2)**; The project will support enhanced enabling environments within the forest sector through integration of sustainable forest management considerations within policy and planning processes in the project area. It will also assist in improving the viability of SFM through the establishment of PES models that implement and test guidelines established by the Viet Nam Decree on Forest Payments for Ecosystem Services (2010). In addition, the project will establish carbon stock baseline and monitoring systems for the project area in conjunction with the CarBi Project and ADB BCC Project.

(d) **Land Degradation (LD3)**: The project will assist in reducing pressure on natural resources from competing land uses in wider landscape by demonstrating combined forest and land/watershed rehabilitation. It will support policies, sector plans and land use plans to integrate sustainable agricultural land management, including the good practices for SFM. In addition it will increase investments in integrated land management, by ensuring a sustainable flow of agro-ecological services, that support sustainable local production and livelihood systems.

7. Summary descriptions of baseline and incremental reasoning

ADB Biodiversity Corridors Conservation Project in Vietnam (\$30 M) addresses forest tenurial security, habitat restoration on degraded lands, livelihoods and small scale infrastructure, and local employment. *WWF/KfW Carbi Project* (\$7.196 M) seeks to better protect and develop the interconnected conservation areas in Vietnam and Laos; rehabilitate neighbouring forest corridors; introduce systems which make the timber trade in Vietnam and Laos more transparent; and train the local administration in REDD mechanisms, project design and assessing forests' carbon reserves. *WB Adaptive Program Lending for Strengthening regional cooperation for wildlife protection in Asia* (\$18M) will build or enhance shared capacity, institutions, knowledge and incentives to collaborate in tackling illegal wildlife trade and other select regional conservation threats to habitats in border areas, with a particular focus on the Global Tiger Initiative partnerships.

The project will provide a GEF increment to these projects by:

- Providing resources to fill a strategic geographic gap in the sustainable management of the Central Annamites landscape between the KfW-funded project “Avoidance of deforestation and forest degradation in the border area of southern Laos and central Vietnam for the long term preservation of carbon sinks” (CarBi Project) which is focusing on the east-west conservation corridor between Vietnam and Laos, and the ADB-funded Biodiversity Corridors Conservation Project (ADB-BCC) which is focusing on the north-south corridor outside of the PAs.
- Establishing a landscape conservation framework for the Central Annamites (in conjunction with ongoing projects and programs), including strengthening the sustainable management of protected areas, forest lands and agro-forestry zones;
- Supporting the integration of good practice forest, land and watershed management in policy and planning framework for the project area, including integrating SFM, biodiversity, watershed protection and climate resilience measures within land use and sector plans.
- Strengthening the management effectiveness of 6 protected areas in the Central Annamites and establishing sustainable financing plans and PES mechanisms

- Providing investments for the restoration and enhancement of carbon stocks in forest landscapes in the Central Annamites, integrating biodiversity conservation and benefit sharing mechanisms for local communities and ethnic minority groups.
- Strengthening community-based forest management in forest landscapes;
- Establishment of forest carbon stock baselines and monitoring systems for the project area; and
- Gathering and disseminating the lessons learned from of the application of integrated SFM and PA models in the Central Annamites.

These areas will be further developed at the PIF stage.

8. Budget.

<i>Source</i>	<i>Type & FA</i>	<i>Amount</i>
GEF Trust Fund	Grant – Biodiversity	1,300,000
GEF Trust Fund SFM/REDD	Grant - Multifocal	1,000,000
GEF Trust Fund	Grant – Climate Change	1,000,000
GEF Trust Fund	Grant – Land Degradation	1,000,000
Subtotal		4,300,000
Asian Development Bank	Soft loan	30,000,000
The World Bank	Soft loan	9,000,000
The World Bank	Grant – FCPF	3,600,000
WWF/KfW	Cash/In-Kind (TBC)	7,196,000
Government of Vietnam	In-Kind	750,000
Co-financing Subtotal		50,546,000
Total		51,291,000

*Amount includes Project Management Costs and GEF Agency Fees