PROJECT IDENTIFICATION FORM (PIF).

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

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PART I: PROJECT INFORMATION

Project Title:	Sustainable Forest and Land Management in the Dry Dipterocarp Forest Ecosystems of Southern Lao PDR		
Country(ies):	Lao Peoples Democratic Republic	GEF Project ID:[1]	6940
GEF Agency(ies):	UNDP	GEF Agency Project ID:	5448
Other Executing Partner(s):	Ministry of Natural Resources and Environment	Submission Date:	August 22, 2014
GEF Focal Area(s):	Multi-focal Areas	Project Duration (Months)	72
Integrated Approach Pilot	IAP-Cities ☐ IAP-Commodities ☐ IAP-Food Security ☐		Corporate Program: SGP ☐
Name of parent program:	N/A	Agency Fee($)	979,126

A. INDICATIVE FOCAL AREA STRATEGY FRAMEWORK AND OTHER PROGRAM STRATEGIES[2]:

Objectives/Programs (Focal Areas, Integrated Approach Pilot, Corporate Programs)	**Trust Fund**	**(in $)**	
		GEF Project Financing	**Co-financing**
BD-1 Program 1	GEFTF	3,100,000	10,700,000
BD-2 Program 2	GEFTF	3,128,900	9,200,000
LD-3 Program 4	GEFTF	1,023,883	14,200,000
SFM-1	GEFTF	2,626,391	15,700,000
SFM-3	GEFTF	1,000,000	4,940,013
Total Project Cost		10,879,174	54,740,013

B. INDICATIVE PROJECT DESCRIPTION SUMMARY

Project Objective: To facilitate a transformative shift towards sustainable land and forest management in the forested landscape of Savannakhet Province in order to secure the critical wildlife habitats, conserve biodiversity and maintain a continuous flow of multiple services including quality water provision and flood prevention.

Project Component	**Financing Type[3]**	**Project Outcomes**	**Trust Fund**	**(in $)**	
				GEF Project Financing	**Co-financing**
1. Enabling policy environment and increased compliance and enforcement capacities for sustainable land and forest management across landscapes including protected areas	TA	Reduced degradation over 1.04 million ha of forest landscapes in Savannakhet Province leading to unabated provision of ecosystem services such as water supply (quality), flood prevention and biodiversity conservation as a result of improved land use planning measured by: a) 5 District Integrated Land Use Management Plans (ILUMPs) developed (as measured in the LD PMAT Part II) and fully integrated into an enhanced process for developing Districts' Socio-Economic Development Plans (SEDPs)[4] b) Improved forest management measured by an increase in total area under SFM (in LD PMAT Part II) c) Multi-sectoral stakeholders committees including local community and business	GEFTF	2,361,118	27,000,000

[1] Project ID number will be assigned by GEFSEC and to be entered by Agency in subsequent document submissions.
[2] When completing Table A, refer to the GEF Website, *Focal Area Results Framework* which is an *Excerpt from GEF-6 Programming Directions*.
[3] Financing type can be either investment or technical assistance.
[4] The SEDP planning process would include enhanced consideration of underlying natural systems, better spatial analysis and evaluation , consideration of changes in Environmental Service Values under different options, and climate change mitigation and adaptation, thus enabling optimal allocation of land and critical BD and LD benefits in tandem.

		representatives at each of the 5 districts oversee ILAMPs development, its integration into SEDPs and implementation and enforcement. Enhanced local capacities emplaced for compliance and enforcement of sustainable forest and land management and mainstreaming of forest connectivity into the main production sectors in Savannakhet Province as measured by the UNDP-GEF Capacity Development Scorecard			
2. Sustainable Forest Management and Protected Area Expansion in five priority Districts of Savannakhet Province	TA / INV	Biodiversity management/ecosystem service provision mainstreamed in forest landscape management in five priority districts resulting in improvements in the status of biodiversity and ecosystem services indicated by a) Increased or stable populations of IUCN Endangered Status Species: Eld's Deer (*Panolia eldii*), and Green Peafowl (*Pavo muticus*) and IUCN Critically Endangered Siamese Crocodile (*Crocodylus siamensis*). b) Maintenance of baseflows and reduced flooding in downstream area of Xe Bangxiang River. c) Elevation of conservation status of at least 50,000 ha. d) Set-aside areas (High Conservation Value Forests) for non-exhaustive forest use (tourism, sustainable NTFPs harvesting) of at least 100,000 ha in new and existing Protection Forests. e) Restoration of app. 10,000 hectares of degraded forest in Protection Forests to counteract ongoing and past land degradation. Increase of management effectiveness of at least 4 protected areas covering 420,000 ha as measured by METT. *[Baselines and targets to be developed for all above indicators during PPG]*	GEFTF	5,000,000	22,133,346
3. Developing and Promoting Incentives and Sustainable Financing for Biodiversity Conservation and Forest Protection	TA	20 % increase in public and private investment in BD and ecosystem management in targeted landscape in Savannakhet Province through diverse and new revenue sources, compared with the baseline of 2015. Wildlife-based ecotourism products designed Incentives and other benefits to community are directly linked to wildlife recovery and forest protection	GEFTF	3,000,000	3,000,000
		Subtotal		10,361,118	52,133,346
		Project Management Cost (PMC)[5]	GEFTF	518,056	2,606,667
		Total Project Cost		10,879,174	54,740,013

If Multi-Trust Fund project :PMC in this table should be the total and enter trust fund PMC breakdown here (N/A)

[5] For GEF Project Financing up to $2 million, PMC could be up to10% of the subtotal; above $2 million, PMC could be up to 5% of the subtotal. PMC should be charged proportionately to focal areas based on focal area project financing amount in Table D below.

C. INDICATIVE SOURCES OF CO-FINANCING FOR THE PROJECT BY NAME AND BY TYPE, IF AVAILABLE

Please include confirmed co-financing letters for the project with this form.

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Amount ($)
Recipient Government	Department of Forest Resource Management, MONRE	In-kind	2,545,000
Recipient Government	Provincial Forest Resource and Environment Office	In-kind	367,662
GEF Agency	UNDP	Grant	4,344,751
GEF Agency	ADB	Grant	46,402,600
CSO	Wildlife Conservation Society	Grant	250,000
Donor Agency	Government of Finland	Grant	830,000
Total Co-financing			54,740,013

D. INDICATIVE TRUST FUND RESOURCES REQUESTED BY AGENCY(IES), COUNTRY(IES) AND THE PROGRAMMING OF FUNDS [a)]

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	(in $)		
					GEF Project Financing (a)	Agency Fee (b)[b)]	Total (c)=a+b
UNDP	GEFTF	Lao PDR ☒	Biodiversity		6,229,234	560,632	6,789,866
UNDP	GEFTF	Lao PDR ☒	Land Degradation		1,023,549	92,119	1,115,668
UNDP	GEFTF	Lao PDR ☒		SFM	3,626,391	326,375	3,952,766
Total GEF Resources					10,879,174	979,126	11,858,300

a) No need to fill this table if it is a single Agency, single Trust Fund, single focal area and single country project.
b) Refer to the Fee Policy for GEF Partner Agencies.

E. PROJECT PREPARATION GRANT (PPG)[6]

Is Project Preparation Grant requested? Yes ☒ No ☐ If no, skip item E.

PPG AMOUNT REQUESTED BY AGENCY(IES), TRUST FUND, COUNTRY(IES) AND THE PROGRAMMING OF FUNDS

GEF Agency	Trust Fund	Country/ Regional/Global	Focal Area	Programming of Funds	(in $)		
					PPG (a)	Agency Fee[7] (b)	Total c = a + b
UNDP	GEFTF	Lao PDR ☒	Biodiversity		73,519	6,617	80,136
UNDP	GEFTF	Lao PDR ☒	Land Degradation		13,148	1,183	14,331
UNDP	GEFTF	Lao PDR ☒		SFM	43,333	3,900	47,233
Total PPG Amount					**130,000**	**11,700**	**141,700**

[6] PPG requested amount is determined by the size of the GEF Project Financing (PF) as follows: Up to $50k for PF upto $1 mil; $100k for PF up to $3 mil; $150k for PF up to $6 mil; $200k for PF up to $10 mil; and $300k for PF above $10m. On an exceptional basis, PPG amount may differ upon detailed discussion and justification with the GEFSEC.

[7] PPG fee percentage follows the percentage of the Agency fee over the GEF Project Financing amount requested.

F. PROJECT'S TARGET CONTRIBUTIONS TO GLOBAL ENVIRONMENTAL BENEFITS[8]

Provide the expected project targets as appropriate.

Corporate Results	Replenishment Targets	Project Targets
- Maintain globally significant biodiversity and the ecosystem goods and services that it provides to society	Improved management of landscapes and seascapes covering 300 million hectares	*1,043,000 ha*
- Sustainable land management in production systems (agriculture, rangelands, and forest landscapes)	120 million hectares under sustainable land management	*N/A*
- Promotion of collective management of transboundary water systems and implementation of the full range of policy, legal, and institutional reforms and investments contributing to sustainable use and maintenance of ecosystem services	Water-food-ecosystems security and conjunctive management of surface and groundwater in at least 10 freshwater basins;	*N/A*
	20% of globally over-exploited fisheries (by volume) moved to more sustainable levels	*N/A*
4. Support to transformational shifts towards a low-emission and resilient development path	750 million tons of CO_{2e} mitigated (include both direct and indirect)	*Over a 10-year period, avoided GHG emissions of 2,779,039 tons of CO_{2e} and the sequestration of 516,688 tons of CO_{2e}*
- Increase in phase-out, disposal and reduction of releases of POPs, ODS, mercury and other chemicals of global concern	Disposal of 80,000 tons of POPs (PCB, obsolete pesticides)	*N/A*
	Reduction of 1000 tons of Mercury	*N/A*
	Phase-out of 303.44 tons of ODP (HCFC)	*N/A*
6. Enhance capacity of countries to implement MEAs (multilateral environmental agreements) and mainstream into national and sub-national policy, planning financial and legal frameworks	Development and sectoral planning frameworks integrate measurable targets drawn from the MEAs in at least 10 countries	*N/A*
	Functional environmental information systems are established to support decision-making in at least 10 countries	*N/A*

PART II: PROJECT JUSTIFICATION

PROJECT OVERVIEW

A.1. Project Description. Briefly describe: 1) the global environmental problems, root causes and barriers that need to be addressed; 2) the baseline scenario or any associated baseline projects, 3) the proposed alternative scenario, with a brief description of expected outcomes and components of the project, 4) incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and co-financing; 5) global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF); and 6) innovativeness, sustainability and potential for scaling up.

Global environmental problems:

The Central Indochina Dry Forests [IM0202] ecoregion is one of the identified Global 200 WWF Ecoregions[9]. It covers most of central Indochina and harbours an outstanding assemblage of threatened large vertebrates that characterize the mammal fauna of the Indo-Pacific region[10]. It covers 320,000 km^2 and extends widely in Thailand, along the broad valley of the Mekong River in central and southern Lao PDR and has a widespread distribution in the arid plains of northern, eastern and south-

[8] Provide those indicator values in this table to the extent applicable to your proposed project. Progress in programming against these targets for the projects per the *Corporate Results Framework* in the *GEF-6 Programming Directions*, will be aggregated and reported during mid-term and at the conclusion of the replenishment period.

[9] Olson, D.M. & Dinerstein, E. 2002. *The Global 200: Priority Ecoregions for Global Conservation.* Ann. Missouri. Bot. Gard. 89:199 – 224.

[10] The ecoregion's 167 mammal species include an impressive assemblage of threatened large vertebrates, such as the critically endangered kouprey and Eld's deer, the endangered tiger, Asian elephant, guar, banteng, wild water buffalo and serow.

central Cambodia. Over this range, the ecoregion characteristically occurs in areas with 1,000 – 1,500 mm rainfall and five to seven months of drought. Deciduous dipterocarp forest, the name commonly used for the characteristic forest association of the Central Indochina Dry Forests, forms an open forest or woodland community dominated by deciduous trees. Lao People Democratic Republic (PDR), a small and relatively sparsely populated country in the Mekong region is characterized by an abundance of natural resources. Lao PDR is located in the centre of Indochina with a territory of 236,800 km^2. According to the results of the last reconnaissance survey of forest cover in 2002, the total land area of Lao PDR covered by natural forest (canopy density of higher than 20% and height above 5 meters) was 98,247 km^2 ha or roughly 41.5% of the total land area, while the drylands (lowland dipterocarp forest) covered approximately 13,172 km^2 of 13.88% of the total land area; almost all this land area is located in the central and southern parts of the country[11]. The majority of the Lao PDRs' small human population of about 6 million lives in rural areas and are dependent on subsistence agriculture. The country remains the poorest in the region and ranks 122 out of 169 countries on the 2010 United Nations Human Development Index.

Savannakhet Province, located in the southern part of the country, is the largest province in Lao PDR, covering an area of 21,774 km^2. The province is made up of the fifteen districts.[12] The population of the province is 825,879 (as per March 2005 census). The province has experience rapid economic growth in recent years. During the period 2005 – 2010 the province's economy had grown at a rate of 10.5% a year. The economic structure is made up of 49.04% Agriculture and Forestry, 26.42% Services and 24.54 % Industry. Savannakhet province has a total forest area of 1.1 million ha, representing 52% of the total provincial area. 46% is conservation, 40% protection forest and 14% production forest[13]. The main types of forest are dry dipterocarp, lower and upper mixed deciduous dry evergreen forest and bamboo. Savannakhet also has four National Biodiversity Conservation Areas (Phou Xang Hue (109,000 ha), Dong Phou Vieng (197,000 ha), Laving-Lavern (86,000 ha) and Xe Bang Noun (150,000 ha but only app. 10% inside Savannakhet province), a protection forest (Se Ta Bouan-Phan Nak, 97,000 ha), as well as a number of provincial protected areas (including Eng Mang Conservation Forest (97,000 ha). The two production forests (Dong Sithounh (150,900 ha) and Dong Khapo (51,650 ha)) in the province are state-owned and operated with the participation of local villages in collaboration with the provincial government. The forest plays an important and at times essential role in supporting livelihoods. Wildlife and non-timber forest products (NTFPs) are consumed by households as well as sold for extra cash income.

Biodiversity: Threatened wildlife species found in Savannakhet include Siamese Crocodile (*Crocodylus siamensis*), Giant Ibis (*Thamatibis gigantea*), Douc Langur (*Pygathrix nemeaus*), Asian Elephant (*Elephas maximus*), Eld's Deer (*Panolia eldii*) and Green Peafowl (*Pavo muticus*). Fish species also constitute an important biological resource in Savannakhet, with the fish species diversity in the Mekong Basin currently estimated at 1,200 species, with about 500 indigenous species in the Lao portion of the Mekong and its tributaries of which 6 – 9 species are believed to be threatened. Water Resources: Many rivers flow across Savannakhet province. The most important of these rivers are the Mekong, Xe Bangxiang, Xe Bangfai, Xe Noy, Xe Champone, Xe Sansoy, Xe Lanong, Xe Pone and Xe Thamouak. The rivers and wetlands provide an important habitat for aquatic species, as well as form the basis for irrigation system development and electricity development. The province already has existing irrigation schemes, while the GoL and provincial authorities are currently conducting feasibility studies for a number of new irrigation and hydro-electricity (at least five) projects. Flooding is the main natural disaster in the country – both interms of frequency and consequences. There are floods along the Mekong River every year. Water supply, particularly in the dry season is also an issue in Savannakhet. Agriculture and Forestry: Savannakhet's climate, landscape and infrastructure development makes it one of the most suitable locations for investment in the agricultural sector. The province has a total agricultural land area of about 1.5 million hectares, representing 68% of total provincial land area. However, a large share of this agriculture land is considered to have low fertility. Currently, about 209,598 ha, representing only 14% of total agricultural

[11] ftp://ftp.fao.org/docrep/fao/012/1067e/1067e01.pdf

[12] (1) Kaysone; (2) Outhoumphong, (3) Atsaphanthong, (4) Songkhone, (5) Xepone, (6) Nong, (7) Thapangthong, (8) Songkhone, (9) Khampone, (10) Xonnabouly, (11) Xaybuly, (12) Vilabuly, (13) Atsaphone, (14) Xayphouthong, and (15) Phalanxay

[13] Conservation forest – designated for "preserving plant and animal diversity, conserving forest ecosystems and other valuable sites of natural, historical, cultural, tourism, environmental [or] educational importance". Production forests – forest designated "for production, and wood and forest product businesses to satisfy the requirements of national socio-economic development [and] people". Protection forests – forests designated for "protecting water resources, river banks, road sides, soil quality, preventing soil erosion and strategic areas for national defense".

land, or about 9.6% of total provincial area, is in use for agricultural production. The Agriculture and Forestry Sector of Lao PDR in the recent years grew at 4% and accounted for 30.4% of the total GDP in 2009. The main areas for plantation and agricultural production, especially the rice crop, are located in the central part of the country, with Savannakhet Province having the largest area under crops (mainly rice). It accounts for 22% of area under rice in the country. The lowland area between the Xe Xangxay and Xe Champhon tributaries is particular important since it holds about 50,000 ha of fertile farm land, but suffers annually due to flooding from the Bangxiang river discharge during August to September. Every year about 10,000 – 20,000 ha out of the 50,000 ha is damaged by floods. Mining: the province is rich in mineral resources, including deposits of copper, gold, ceramics, potassium, sodium and iron. The Sepon mine (owned by China Minmetals Non-ferrous Company) is the largest copper and gold mine in Lao PDR and situated in the Savannakhet Province. Tourism: Tourism is an important sector, which creates multiple benefits and generates income for the ethnic people in both cities and rural areas. Of recent, tourism in Lao PDR has had a rapid growth as tourist arrival data suggest. In 2009, tourist arrivals were 2,008,363; an increase by 15.8%. This generated US$ 258,04 million in revenue (equivalent to 5.19% of the GDP, which is a 16.8% annual increase. Tourist arrivals to regions and provinces: During 2006 – 2008, the largest number of tourists came to the central region, i.e. 62.4% of the total tourist arrrivals. This region experienced an annual increase of 22.75. The province receiving the largest number of tourists is Vientaine Capital, 28.7% of total tourists in the country, which is 46.1% of all tourists to the central region. The second largest proportion of tourist arrivals is in Savannakhet province (15.5% of all tourists, and 24.9% of tourists to the central region.

Threats to Biodiversity and Ecosystem Services in the Savannakhet Province can be categorised as:
Conversion and Degradation of Natural Habitat and Ecosystems: Deforestation and fragmentation of forests in the form of forest clearance to allow for urbanization, infrastructure development, industrial forestry and agriculture developments, timber logging both commercial and small-scale (mostly illegal), and mining operations have been the main forces behind land degradation. Forest cover in Savannakhet province has been reduced from about 60% of land area in 2005 to its current level of approximately 52%. It should be noted that forest cover statistics cannot provide an accurate picture of the quality of forests in the province. However, reports indicate that Savannakhet has experienced a loss of forest area as well as a loss of 'richer forest' and a gain in 'poorly stocked areas'. The loss of forest is attributed to the growth of plantation industry and commercial/industrial agriculture, increased wood exports, and multiple construction projects. New plantations and agricultural fields result in direct habitat loss and changes in ecosystem dynamics. It replaces existing landscapes with monocultures of fast-growing, exotic trees or agricultural crops. Both forestry and agriculture have a higher water use than the native vegetation resulting in changes in streamflow. The impact of low (base) flows is proportionally more severe and also more critical. Further runoff is more immediate and severe in areas coverted to other land uses than forests leading to an increase in the extent and severity of floods. Invasive alien plants often spread out of commercial plantations, with riparian zones particularly susceptible to invasion. Mining is also contributing to loss of forest area and the loss of ecosystem services provided by intact forest ecosystems. It can be inferred that the loss of forest cover and forest quality in Savannakhet has had negative impacts on the biodiversity of the province. Similarly, habitat loss and disturbance in the province's wetlands, streams and rivers through overharvesting, drainage and conversion to agriculture, pollution, damming and so on, can also be expected to negatively affect biodiversity.
Overharvesting of biological wildlife resources: Poaching and the illegal wildlife trade have increased significantly as a result of the economic growth in the region, especially China and Vietnam. In the protected areas of Savannakhet Province, hunting of ground fauna is especially heavy (arboreal species seem less affected) with a strong market demand for the most commercially viable species. The increasing demand for wildlife is also linked to population growth and globalization. For example, IUCN states the major threat to two of the endangered species (Eld's Deer and Green Peafowl) found in the Savannakhet Province is illegal hunting. For Eld's deer, hunting is driven by local consumption of meat and a thriving and probably increasing trade in bushmeat, a national, regional and East Asian market for traditional medicinal products derived from the species, and a regional international market for trophy antlers.[14] Green Peafowl is hunted for meat and its feathers, and eggs and chicks are also collected leading to the decline of numbers of this species.

Target Area within Savannakhet Province: The target area of this project will be the following five adjacent districts: Phine (337,204 ha); Sepone (230,857 ha), Thapangthong (211,619 ha), Songkhone (163,500 ha) and Xonnabouly (106,000 ha) covering the southern-central and north-eastern part of the Savannakhet Province[15]. These districts form a consolidated area of 1,043,000 ha, with most of the area's natural vegetation being dry dipterocarp forest and changing into dry evergreen forest towards the northern, more mountainous areas. The area covers the main catchment areas of the Xe Biangxiang River.

[14] www.incnredlist.org/details/42665/0
[15] Final selection of districts will be made during PPG phase

Baseline projects and resources that will be committed from them

The country will commit to natural resource management in Savannakhet Province and will invest in excess of US$50 million in Natural Resource Management in the province over the project period. This can be loosely divided into three areas; that are related to regulation, planning and enforcement/management.

Regulation: The Ministry of Natural Resources and Environment will invest in excess of US$ 5 million over the project period for the development of national environmental standards, specifications and guidelines regarding environmental practices and management. Specifically, the Department of Environmental and Social Impact Assessment will invest in approximately US$ 1 million in its overview of investment proposals and issuing CCAs nationally during the project period. The Forest Resources Management Department of MONRE will invest US$ 0.5 million per year nationally during the project period in providing directions, policy plans, resolutions, orders, laws, decrees and regulations on sustainable management, conservation, protection, development, restoration, and utilization of forest resources in protection forests, conservation forests, connected and specific conservation areas. The Ministry of Agriculture and Forestry will invest in excess of US$ 0.5 million over the project period for regulation formulation and compliance monitoring role of agriculture and forestry in the province.

Planning: An estimated US$ 2,540,000 will be spent in the Sovannakhet Province by the Land Allocation and Land Development Department, PONRE on the development of district and provincial master plans on land allocation and land use and the issuing of land use inventory, land use certificate and land development certificate. The Ministries of Agriculture and Forestry, Industry and Commerce, Planning and Investment and Energy and Mines will invest in excess of US$ 2.5 million over the project period in assistance to district land use planning and in reviewing investment proposals. At the district level, approximately US$ 0.5 million will be allocated to district development plans. At the same time, DFRM will invest US$ 0.1 million over the project period in developing and updating Management Plans for and zoning of Conservation and Protection Forests. The Ministry of Agriculture and Forestry will invest in excess of US$ 0.5 million per year over the project period for planning purposes in the Production Forests.

Enforcement and Management: The Department of Forest Resource Management will invest US$ 0.1 million over the project period in the management of the three National conservation forests and the protection forest in the province. The Ministry of Agriculture and Forestry will invest US$ 0.5 million over the project period in production forest management activities and US$ 0.25 million a year in agricultural production extension activities.

The following baseline projects will be implemented during the project implementation period:

(i) The Poverty and Environment Initiative Phase II (2011-2015) will be making an investment of US$ 4.167 million in Lao PDR over the project period. The programme objective is to strengthen capacity of national and local government to better manage foreign direct investment in Lao PDR. This project has the following focus areas relevant to the roposed project: (i) increased promotion of sustainable, equitable, and climate resilient development into the National Social and Economic Development Plan planning/formulation and monitoring and evaluation at national and provincial level; (ii) national and provincial investment strategies are implemented to strengthen investment management systems for quality and sustainable growth in Lao PDR; (iii) Improved effectiveness of ESIA system, particularly for agriculture and forestry plantation sector as a safeguard for sustainable and climate-resilient development. PEI works at the central level as well as in the six pilot provinces of Phongsaly, Oudomxay, Savannakhet, Saravan, Vientiane and Houaphan.

(ii) The Sustainable Forestry and Rural Development (SUFORD) Scaling Up Project (2014 – 2018) is a multilateral project between the Government of Lao PDR, the World Bank, and the Government of Finland. The project is being implemented in 12 provinces, including Savannakhet Province, which will receive an initial budget allocation of US$ 830,000. The goal of the project is to establish Participatory Sustainable Forest Management (PSFM) in Production Forests aiming to contribute to rural development, poverty reduction of rural people, biodiversity conservation and forestry development and national socio-economic development.

(iii) The Sustainable Natural Resource Management and Productivity Enhancement Project (SNRMPEP) (ADB, IFAD and Government of Lao PDR) will invest US$ 37.475 million (of which US$ 5.4 million is targeted towards Savannakhet Province) in promoting sustainable agricultural commercialization and natural resource management. This investment focuses on agricultural land use planning, construction and/or rehabilitation of water conveyance, irrigation canal and/or systems, rural access roads, earthen dams and water pumps, and initiatives to enhance productivity and strengthen production groups. Under the scenario without GEF, there will be no integration of biodiversity values and ecosystem services in land use plans resulting in long-term economic loss.

(iv) The ADB Greater Mekong Subregion East-West Economic Corridor Agriculture Infrastructure Sector Project will make an investment of US$ 40 million in Savannakhet Province in improving access to markets and economically linking the sector to Thailand, Vietnam and beyond. The project will also improve agricultural infrastructure.

(v) ADB Smallholder Development Project will promote integrated agribusiness models, expansion of organic farming and

post-harveting practices, and strengthening of the capacity of farmer groups in production techniques in Savannakhet Province with an investment of US$ 1 million during the project period.
(vi) The Eld's Deer Project (WWF) will invest US$ 200,000 during the project period in the management of the Eld's Deer Sanctuary in the Eng Mang Provincial Conservation Area. Main activities include strengthening law enforcement to reduce poaching and habitat encroachment, raising public understanding of the significance of Eld's Deer conservation, land-use planning in the 7 target villages, and improving incentives for village-based conservation activities.

Root causes and barriers that need to be addressed

2. **The long term solution sought by the project** is to change the trajectory of the baseline approaches in order to facilitate a transformative shift from unsustainable to integrated sustainable land and forest management within the larger framework of rural development and expansion of livelihoods potential. There are, however, three major barriers to implementing this solution, as described below:

Inadequate legal, regulatory and institutional framework for Integrated Natural Resource Management:

Short timeframes for land allocation decisions are noted in the legislation aimed at easing the requirements for setting up new businesses in Lao PDR. Planning officials, including staff of MONRE and PONRE, are required on short notice to comment on investment proposals, with little information regarding the natural resources present at the site. Further, except for the CPMI/PCMPI set up specifically for investment approvals, the agriculture, forestry and protected areas management sectors financial and human resources are deployed and managed by sectoral departments working in silos. Coordination among these regulatory authorities is weak and this often results in land use changes and developments being approved without effective consultation. Decision-makers lack solid information on which to base decisions regarding land use allocation and management. Without a proper assessment, monitoring and planning regime for the maintenance of ecosystem goods and services, managers and users have a difficult time effectively evaluating and integrating land degradation risks and threats to biodiversity within decision-making. Further, the allocation of land for economic uses and the regimes of use do not take into consideration ecosystem services, except in the case of protected areas where biodiversity is considered. This greatly diminishes the value that the ecosystem goods and services can provide. Further, once land is allocated as forest land or agricultural land no further consideration is given towards connectivity between and within the ecosystem services and biodiversity habitats within the broader landscape, leading to increased fragmentation and loss of ecosystem goods and services values. There are still a number of gaps in the regulatory framework in which investments could lead to environmental degradation. Findings from case studies in Savannakhet province[16] indicate that the laws and regulations still have some gaps and weak points, which are liable to be misused. For example, clearing "primary" and "secondary" forest for agriculture production purposes is forbidden especially for plantations. However, the lack of a concrete definition what exactly "secondary" and "degraded" forest are allows clearing of forest to continue. [17] Many Ministerial and Provincial staff do not understand the regulations and laws very well, and confusion remains regarding the division of labour between the central and provincial levels. A set of policies and regulations is required in order to incorporate the definition of high value of biodiversity and ecosystem services, prescribe the need to identify and describe the procedure and standards for identification and designation of High Conservation Value Forests, and prescribe the priority for avoiding damage to ecosystem integrity when planning any economic activities at the time of land use planning. Coordination between the many agencies that play a formal part in investment approval and management at both the central and local levels is difficult. The staff have insufficient experience of expertise, particular in technical areas such as the assessment of social and environmental impacts. The departments charged with monitoring and evaluation of investment projects also lack the budget and equipment necessary to meet its obligation and lack the capacity to generate, implement and enforce integrated forest and land use plans. Based on this, the Savannakhet Province investment management system needs to be improved in order to effectively approve, manage, and monitor investments so as to limit negative social and environmental development.

Minimal experience among key government and civil society stakeholders in developing and implementing SFM practices on the ground:

Landscape level biodiversity and ecosystem management is a relatively new concept in Lao PDR, and each land unit in the remaining major habitat blocks within the Savannakhet Province is independently managed, whether they are managed by the state and local government agencies, smallholder farmers, the private sector or the communities. In the past, land use allocation did not take into account the conservation values of forests when assigning it to production purposes neither did it incorporate the value of ecosystem goods and services that are delivered in intact forest patches. There is insufficient know-how for landholders, public or private, to implement Master Plans and SEDPs. There is an unmet need to test the different means for achieving connectivity, and action in this regard is constrained by insufficient incentives and weak landholders' capacities for internalising biodiversity

[16] Poverty-Environment Initiative Lao PDR, 2011. Report on Economic, Social and Environmental Costs and Benefits of Investments in Savannakhet Province.
[17] "Focus group discussion during the case studies in Savannakhet and Saravan provinces indicated that the gaps in the Forestry Law make it widely misused. Large forest areas (including primary and secondary forest) have been converted into sugar cane and rubber plantations" as cited in PEI-Lao PDR, 2011.

conservation and sustainable land and forest management in land management activities. Within this context, existing forests within protection forests (multiple-use PAs) are not adequately zoned for its biodiversity and the services it provides to society. This has led to the degradation of high conservation value forests within the protection forests as well as areas in current 'open areas'. There is an urgent need to identify the HCVFs and place these under increased protection category/zone in order to ensure important services are maintained. Further, the connecting corridors between the Dong Phou Vieng Conservation Forest, Se Ta Nouan – Phou Nak Protection Forest, Eng Mang Provincial Conservation Area and Laving-Laveun PA are continually being fragmented and degraded by physical development (towns, transport) and land use (agriculture, forestry and mining). The importance of maintaining functional connectivity between forested areas is intensified by the emerging and real threats of climate change. There is a need to ensure linear ecological corridors (primary linkages) and stepping stone corridors (secondary linkages) for enhanced ecosystem services provision, wildlife movement and as an adaptation measure against climate change. Further, regarding the diffuse accountability of PA management to district environmental officers as well as little staff, no equipment, little communication and training, PAs that do not receive external assistance are simply not managed.[18]. There is a need to capacitate PA management through staffing, training and equipping the PAs.

No mechanisms to compensate for land uses for conservation of biodiversity and ecosystem services:

The Dipterocarp Forests of Savannakhet Province provide vital and irreplaceable ecosystem services. The forests are vital for providing water and protecting water quality. They regulate water runoff during times of heavy rain, reducing flood events, and prevents soil runoff that increases the siltation of hydroelectric reservoirs. These services are essential to ensure future water and electricity supplies in Lao PDR. It also offers natural forest products such as rattan for local populations and nationally important nature-based tourism resources. However, these ecosystem services and their economic values are not fully recognized, and the land managers in the Savannakhet Province do not have sufficient incentives to effectively manage the land for biodiversity and ecosystem conservation and increase the protection areas to enhance protection and connectivity. As a result, the cost of keeping the intact forest is borne by the state governments and local communities. For the state governments to be able to set aside sufficient amounts of forest lands for conservation, there needs to be stronger recognition of the ecosystem services value and they need to be able to derive income from such land use. Forest communities need to have incentives for keeping the forests and biodiversity in good condition. Insufficient investment into sustainable forest and land management has often been framed as an issue of scarce finances. The on-the-ground reality, however, indicates available opportunities, including from central government allocations and both public and private financial capital and funds. The challenge is that the bulk of the opportunities remain largely untapped and used inefficiently. One reason for limited performance is that both the DFRM and Department of Forest Inspection (DOFI) in the MAF, which is respectively tasked with PA oversight and Production Forests oversight, are critically understaffed and underfunded. A review of 108 countries covering 1993 – 1995 found that the global mean expenditure on protected areas was US$ 898/km2. Developing countries' budgets for protectes areas are less, with governments in East Africa spending an average of $300/km2 managing their PAs.[19] Lao PDR's budget is well below the developing country mean, at US$ 8.86/km2 (US$ 300,000 across approximately 33,800 km2 in FY 2009/2010).[20]

Proposed alternative scenario, with a brief description of expected outcomes and components of the project, incremental cost reasoning and expected contributions from the baseline, the GEFTF, LDCF/SCCF and co-financing

The **objective** of the proposed project is to facilitate a transformative shift towards sustainable land and forest management in the forested landscape of Savannakhet Province in order to secure the critical wildlife habitats, conserve biodiversity and maintain a continuous flow of multiple ecosystem services including quality water provision, flood prevention, carbon storage and sequestration.

Component 1: Enabling policy environment and increased compliance and enforcement capacities for sustainable land and forest management across landscapes including protected areas.

This component will incorporate sustainable land management and biodiversity conservation objectives and safeguards in the land use and natural resource permitting process. Integrated Land Use Management Plans (ILUMPs – refered to as *Master Plans* in Lao PDR) will be developed for the five districts ensuring optimal allocation of land resources to generate development benefits and critical environmental benefits in tandem. All important land users including urban development industry, agricultural sector and forestry sector will be involved in the process. In order to ensure these ILUMPs are based on solid and up-to-date information, a Strategic Environmental Assessment (SEA) of the targeted districts will be undertaken focusing on documenting the causes or drivers of biodiversity and forest loss and degradation. The SEA will provide solid recommendations for avoiding and mitigating the land degradation impacts of the main sectors and for avoiding and reducing

[18] World Bank, 2014

[19] Emerson, L., Bishop, J. and Thomas, I. (2006). *Sustainable Financing of Protected Areas: A global review of challenges and options.* IUCN, Gland, Switzerland and Cambridge, UK.

[20] World Bank, 2014

the loss of BD. The support to INRM will be strengthened by making key spatial data and information available through the development of a GIS based BD/LD/SLM database that would aid landscape modelling and planning, monitoring of impacts on BD, SLM, INRM and associated global environmental and development benefits through community and government actions at different scales. Through these 'decision support systems', the province and targeted districts will be able to determine where critical habitats are, which threats these habitats are suffering, whether a given site has ecosystem services and BD value, what the predominant land use are and what the current as well as potential effects of land degradation on ecosystem services are. The project will set up protocols for monitoring and evaluation of SLM practices in the province and link this to the GIS System. Efforts will be build upon and collate an existing knowledge base that is largely sectoral, e.g. biodiversity conservation, rangeland management, forest management, water resource management, infrastructure development and arable land production. A coordination mechanism that brings together authorities tasked with natural resource and land use planning and permitting will be put in place in the target districts. Further, the project envisages to establish Responsible Business Forum (including plantation, agriculture and mining sector among others) that will also participate in the planning process. The project will review the capacities of the different actors and training will be tailored towards eliminating such gaps. For example, DFRM staff will be capacitated in collaborative approaches and engaging the local communities in PA Management and sustainable forest management, while communities and private sector will receive training in actual PA management and sustainable forest management. This will enable stakeholders (authorities and sectors with most impact) to develop a joint vision for the desired future state of land use in the districts. Promotion of SFM and SLM practices at the district level will be facilitated with a set of necessary national level policies and regulations. Regulations will be adopted to stipulate the process for integrating biodiversity and land degradation concerns into district land use planning and in the socio-economic development plans, including resolutions of the provincial government adopting methodologies and criteria for assessing forest and agricultural land condition for the purpose of subsequent land use decision making. Amendments to the legislation will be sought to stipulate the process for identification and setting aside of High Conservation Value Forests (HCVF) especially in the process of Management Plan development for Production and Protection Forests. Regulatory amendments will also be made in order to stimulate the adoption of innovative financing mechanisms for sustainable forest initiatives. An effective system for compliance monitoring and enforcement of the SEDPs will be discussed and adopted by the multi-stakeholder committee. This will include the clear delineation of roles and responsibilities among government actors. District officials will be capacitated to enforce new land use regulations, communities will be trained for "self-monitoring" systems and private sector capacitated in order to comply with the necessary regulations.

Component 2: Sustainable Forest Management and Protected Area Expansion in five priority Districts of Savannakhet Province

Under this component, the project will work in improving the connectivity between key biodiversity and forest protected areas and improving the management effectiveness of the PAs to realize sustainable forest landscape management. Building on component 1 that is focused on ensuring future developments do adequately incorporate biodiversity and ecosystem values into the development planning, the project will under this component ensure the conservation of intact forest areas and its long-term viability ensured through connectivity among the protected areas as well as in areas allocated to the productive sectors. An important component of this component is the maintenance of ecological connectivity between forest protected areas in the central Savannakhet Province as well as linking up this system to the Northern Annamite Ecoregion (Laving-Lavean PA). This will be achieved through implementing the following forest landscape management practices in line with the SEDPs to be developed under Component 1: (i) New protected areas will be established covering at least 50,000 ha in areas where existing forests provide important ecosystem services as determined under the SEDPs development. These areas will be categorized under the Protection Forest category. (ii) the ecological connectivity between the forest complexes will be further enhanced by designating at least 100,000 ha of intact forests within the existing Protection Forest and the to-be-established Protection Forests as HVCFs (preventing logging and firewood collection in these areas). The delineation of forest complexes as HVCFs will be undertaken with a view towards creating linear ecological corridors (e.g. HVCFs established adjacent to existing National Biodiversity Conservation Areas and provincial conservation forests) and stepping stone corridors (e.g. rather proclaim a HCVF between two existing forest complexes rather than a stand-alone site). This will mostly be informed by information collected under Component 1 and identified in the ILUMPs, but the process will also involve intensive community consultation through the lead agency DFRM. The boundaries of the HCVFs will be delineated and marked and communities capacitated in the management of these forests. From experiences gained at site level a HCVF toolkit, focusing on the identification and setting-aside of HCVFs, will be developed for use in national replication. (iii) the project will reforest/afforest 10,000 ha using mostly advanced ecosystem restoration methods (e.g. using multiple indigenous species, not planting in rows, natural regeneration etc) in order to restore ecological integrity. Community involvement in these schemes and use of local labor will be targeted in order to provide additional incentives to the local community, as well as increase their involvement in the forest enterprise branches. The target areas for restoration will also be deforested/degraded areas within identified HCVFs or provide essential linkages/corridors between forest complexes. (iv) In the production sector areas

allocated to concessions, the project will work with "Leadership Companies" and DAFO and PAFO to identify plantation design and sustainable production techniques, which will be used to develop a set of Sustainable Plantation Forestry and Agriculture Guidelines. One of the conditions envisaged to be included in the Guidelines is the creation of riparian reserves in these areas along the major rivers and streams in order to protect water resources, prevent flooding, erosion and siltation and secure necessary wildlife corridors across the landscape. This component will also invest in capacitating the institutions responsible for PA management to manage these areas, complementing and further enhancing the connectivity initiative of this component. Management plans will be developed and adequate staff, equipment and infrastructure will be provided for the responsible parties to improve the management effectiveness of the existing and new protected areas. Special attention will be placed on improving the law enforcement side of management in order to deal with the illegal hunting pressure. Where possible, law enforcement staff will be recruited from the local communities, as they know the area and by providing employment alternative income is provided. The existing PAs that will be supported are: Dong Phou Vieng Conservation Forest, Se Ta Nouan-Phou Nak Protection Forest and Eng Mang Provincial Forest. Innovative PA management partnerships to improve PA management effectiveness will also be explored and supported e.g. for Dong Phou Vieng Conservation Forest in partnership with New Chip Xeng Company Ltd. Other existing partnerships e.g. WWF and DFRM in the Eng Mang Provincial Conservation Forest (in particular the Eld's Deer Sanctuary within this PA) will be supported.

Component 3: Developing and Promoting Incentives and Sustainable Financing for Biodiversity Conservation and Forest Protection.

This component will support the establishment of incentives for the conservation of ecosystem services, so as to secure the long-term protection of the forests of Savannakhet Province. To build the business case for increasing resources flows, valuation will be undertaken of costs/ benefits of different production systems and SFM practices within selected landscapes and their benefits to ecosystem functioning and to livelihoods. This information will be used by selected local governments to broker public and private resources for increased funding towards SFM. The process of increased funding allocation towards SFM by the project will also involve a process of review and alignment of existing funding to the identified production sectors: Public Expenditure Reviews of the agricultural and forestry and possibly mining sectors in the Savannakhet Province will be undertaken, negative spend will be identified and reduced, and budgets realigned to finance for example the rehabilitation and conservation of forests. For both new and existing (realigned) funding sources, the project will develop resource distribution criteria to ensure the most effective and efficient application of scare resources. The component will also address the missing incentives for wildlife conservation by linking ecotourism success with local community wildlife protection support. During the PPG, four sites with ecotourism potential will be defined where there is also community involvement and ecotourism enterprises supported e.g camp sites, home stays and tourists trails. The testing of innovative financing mechanisms to increase the support to protected area management and forest conservation will be supported. The final decision on what aspects to include under this output will be decided during PPG, but initial ideas are (i) support the public-private partnership that is under discussions at the moment between the Government of Lao PDR, represented by DFRM and the New Chip Xeng Company Ltd. to develop a REDD+ scheme in the Dong Phou Vieng NPA; and (ii) support the Wildlife Conservation Society in their work in setting up a offset scheme with the Minerals and Metal Group (MMG) which holds mining concessions in the Sepone district. Towards the end of the project, a sustainable financing plan for the conservation of protection and conservation forest in the targeted districts will be developed. The development of a ecotourism marketing plan as part of the financing plan will also be supported. In order to further relieve pressures from local communities on forest resources, alternative livelihoods and business support will be promoted through the field testing of Conservation Agreements scheme. Agricultural support, alternative livelihood and direct payments to village trusts will be provided to local villages on the basis of the implementation of agreed forest conservation strategies mutually agreed between DONRE and the communities in stipulated in a signed Conservation Agreement between the parties. The efficacy of such a scheme has been confirmed by national stakeholders but a detailed feasibility analysis for the conservation agreement scheme will be undertaken during the PPG stage.

Summary comparison of baseline and alternative scenarios and global environmental benefits

The global benefits that will be delivered primarily include the adoption of SLM and SFM practices that will reduce land degradation and secure ecosystem services and mainstream biodiversity conservation over a landscape of 1,043,000 ha and test particular SFM approaches in at least 420,000 ha, as follows:

Baseline practices	Alternative to be put in place by the project	Selected environmental benefit
Land Use Planning and Regulation		
Land use planning does not account for ecosystem values and biodiversity, leading to continued forest degradation and loss of	Mainstreaming SLM/SFM principles into provincial and district master (land use) planning and development planning, compliance monitoring and enforcement:	**SFM, LD and BD benefits** Pressures on forest landscapes at an areas of 1,043,000 ha reduced: - Well-functioning ecosystem services (such

ecosystem functions Narrow sectoral approach prevails in terms of land use decision making; forest planning does not incorporate SFM tools. National policies do not support land use optimization to sustain resource resilience nor they allow to operationalize the HCVF concept Weak enforcement capacities to ensure compliance with ecological standards in land use and high level of tresspasses in use of forests	- All land in target districts is classified in line with the principle of retaining the highest carrying capacity of land and forest resources, and the compliance is monitored and enforced. - The approach of High Conservation Value Forests is operationalized in Lao PDR. - Biodiversity identified as value and provision made in in Protection Forest Management Plans for the conservation of static and migratory biodiversity. - Local and business communities' engagement in forest planning and use.	as increase in water quality and reduced extent and severity of floods. - Future large-scale commercial forestry and agriculture integrate ecosystem services values and biodiversity concerns in its management and only allocated to areas where economic value outweighs that of ecosystems and biodiversity. - Protection Forests integrate the concept of HVCFs in their management plans. - Concessions and infrastructure development are allocated in such areas to minimize disturbance to the connectivity of forest complexes ensuring the full value of forest ecosystems are maintained.
Forests and Protected Area Management		
Degradation of dry forests and loss of connectivity of forest complexes through: - Large-scale commercial forestry. - Expansion of urban/settlement. - Conversion to agriculture. - Industrial activity and mining. - Degraded forest areas in important Wildlife Corridors not restored. Uncontrolled Hunting of Wildlife in Protected Areas	Sustainable forest management practices implemented: - Forest exclusion zones and set aside of 100,000 ha as High Conservation Value Forests, replacement of deforestation/degradation with active forest management. - Establishment of at least 50,000 ha of protection forests of open state land that otherwise was destined for deforestation/degradation. - Restoration of at least 10,000 hectares of degraded forests to counteract ongoing and past land degradation. - Creation of riparian reserves in industrial agricultural and forestry areas to secure wildlife corridors and protect water resources. - Incentives for communities to refrain from unsustainable forest use created through the alternative livelihood support scheme. Emplaced effective enforcement and monitoring systems in 3 existing protected areas covering 370,000 ha and new protected areas covering at least 50,000 ha.	**LD Benefits** - maintain water availability, streamflow (especially baseflows) and quality - reduced danger of extent and severity of floods - increased in Biodiversity Intactness in Dry Forests - increase annual household income from forest products, incentive payments and ecotourism ventures. **SFM Benefits** Identification and monitoring of high conservation value forests: Capacity development for SFM within local communities Supporting sustainable finance mechanisms for SFM. 100,000 ha of HCVF identified and designate including provision of wildlife habitat and avoided GHG emissions of 2,779,039 tCO2-eq over a 10 year period 10,000 ha of degraded forests restored, ensuring sequestration of 516,686 tCO2eq over a 10 year period *[based on Tier 1 FAO Exact Model, see Annex 1]* **BD Benefits:** Increase or stable numbers of Eld's Deer (*Panolia eldii*), Douc Langur (*Pygathrix nemaeus*), Siamese Crocodile (*Crocodylus siamensis*) and Green Peafowl (*Pavo muticus*) Increased management effectiveness in existing and new PAs measured by the METT
Incentives and Sustainable Financing		
Insufficient incentives to compensate land managers for conservation of BD and ecosystem services	Increased financing of protected areas as a result of development of ecotourism products and innovative financing mechanisms i.e. REDD+ and Offset schemes. Incentives for communities to refrain from illegal hunting of wildlife through the entering into conservation agreements	Increased financing of protected areas measured by the Sustainable Financing Scorecard Increase or stable populations of Eld's Deer (*Panolia eldii*) and Green Peafowl (*Pavo muticus*)

Innovativeness, sustainability and potential for scaling up

Innovativeness: The integrated approach being implemented through the project (i.e. combining SFM, forest management, biodiversity conservation, PA management and community-based management of forested land, policy and regulation review, financing mechanisms, alternative livelihoods, and training) as a coordinated partnership between government administrations and local stakeholders will provide an innovative example that is expected will (a) generate important lessons for other districts/provinces in the country as well as in other areas of Southeast Asia, and (b) build new national expertise in new fields (e.g. land use planning and integrating PA management/SFM into the wider landscape and economic sectors). Further, the project will illustrate a new approach to land use planning and the allocation of land between different land uses in Lao PDR as it will bring together the various stakeholders within a landscape and develop Integrated Land Use Plans. The establishing of new protected areas and HCVFs in Protection forests, as well as the creation of riparian reserves in agriculture and plantation forestry areas are focusing on the connectivity and long-term resilience of forests and linking these to stable populations of wildife is also a new fresh approach to forest management in Lao PDR. The feasibility of REDD+ and offset schemes will be explored during the PPG stage and if found feasible will add to the innovativeness of the project as forest management entities and community members will receive direct benefits through payments from private sector and other stakeholders for the maintenance of the important forest linked ecosystems services being provided.

Potential for scaling up: With this investment, its replication potential goes far beyond the target areas. The project will test the efficacy of 'Conservation Agreements' in which communities will receive financial benefits in line with achieving agreed conservation objectives. The community livelihood program has great potential for upscaling through additional Government financial support in the Savannakhet Province, but also in other forested areas in Lao PDR and the Southeast Asia region. The project will also be providing enhanced capacities in enforcement of Integrated Land Use Management Plans in ensuring connectivity between the forested complexes of central Savannakhet Province and the Northern Annamite Ecoregion. The efficacy of enhanced enforcement on halting illegal logging has replication implications not only at a local and regional scale but also in addressing other land use strictures that are not being enforced. The project will also provide policy and legislative support in particular to incorporate the avoid-reduce-offset principal into district master plans and district and provincial SEDPs, incorporation of NVCPs into management plans of Production and Protection Forests and regulatory amendments for innovative financing mechanisms. These policies and legislation will be national and will therefore allow all areas within Lao PDR to adopt similar approaches.

Sustainability: This project is building on a strong baseline. First, a policy and institutional framework for PA management and integrating natural resource management into land use planning already exists. Secondly, there is a strong commitment from Government to address the the forest and land degradation issues in Savannakhet Province, as this is one of the target areas of investment in the country but also host still intact forests. Many of the industries are dependent on the ecosystem services that forests provide e.g. downstream rice cultivation are relient on forests for flood prevention. Thirdly, the project has financial sustainability written into it, through the review and realignment of public expenditure and the brokering of additional public and private funding towards natural resource management, as well as the development of ecotourism products and the testing of innovative financing options (i.e. REDD+ and offset mechanisms). Further the project will develop a financing plan for the entire forested area of the target area. The key gaps in the current process are capacity and coordination among all the spheres of Government and stakeholders to recognise the values of natural resources and the ecosystem values it provides and the application of this recognition in the land use allocation and permitting process – which this project is designed to address. The project aims to empower local stakeholders (district authorities, private landowners, communities, PA managers, NGOs, concessionnaires) to become custodians of the important natural resources.

A.2. Stakeholders. Will project design include the participation of relevant stakeholders from civil society and indigenous people? (yes ☒ /no☐) If yes, identify key stakeholders and briefly describe how they will be engaged in project design/preparation:

Stakeholders	Roles in Project Preparation
Ministry of Natural Resources and Environment (MONRE)	The Ministry of Natural Resources and Environment (MONRE) is the central Government Ministry which has been established for management, protection, rehabilitation and use of natural resources and the environment. MONRE is responsible for the management of the environment, land, forests, water, air, biodiversity, and minerals, hereafter referred to as "natural resources and environment", including the management of natural disasters, climate change, meteorology and hydrology throughout the country.
Department of Forest Resource Management of MONRE	The Department acts as the secretariat on sustainable forest management in the country. The Department will facilitate functioning of the project implementation unit (PIU),

	especially in regard to liaison with other government authorities from different sectors. It will take the lead on in the development of policies and regulations on sustainable land and forest management, the establishment of new protected areas and the effective management of the targeted protected areas. It will assist technically in the selection of HVCF in the Protection Forests within Savannakhet Province, as well as in assisting in the development of Sustainable Plantation Forestry and Agriculture Guidance.
Land Management Department, MONRE	The Department is responsible for the development, dissemination and implementation of policy, regulations and strategy on land allocation and management. It also takes the lead in developing land management plans and guidelines for land allocation at district, provincial and central level and issues land use certificates and land development certificates. It monitors land use according to the land allocation plan. The Department will closely with DFRM and take the lead in the development of integrated land use plans for the targeted districts in the Savannakhet Province and the subsequent monitoring of the plans within the realms of the Socioeconomic Development Plans. The Department will take the lead in the development of the Savannakhet Province's GIS-based decision-making support system in order to ensure it is in line with national data management and reporting requirements.
Land Allocation and Land Development Department, MONRE	LALD has the responsibility as the secretariat for MONRE leadership regarding land allocation and development in the country. The department will have an important role to coordinate with the provincial and district offices to develop the policy and strategy on land allocation and development in the short and long term in order to propose to MONRE leadership for subsequent approval. The Department will be involved in the GIS-based land use planning and modelling and in updating the land inventory.
Department of Environmental Quality Promotion, MONRE	The Department is responsible for the development of the National Strategic Environmental Assessment. It will take the lead in the development of SEAs for the targeted five districts as well as in the development of the Sustainable Forestry and Agriculture Guidelines.
Department of Environment and Social Impact Assessment, MONRE	The Department will take the lead in the development of the Strategic Environmental Assessment for the five targeted districts as well as in the development of the Sustainable Forestry and Agriculture Guidelines. This department wil be involved in the development of the District Master Plans and SEDPs.
Department of Disaster Management and Climate Change, MONRE	The department has the mandate to formulate the policies and specific plans of actions in the areas of climate change and disaster risk reduction, including the integration of the natural disaster and climate change management issues into the national social and economic development plan and plans of the line sectors. The project will involve the department to support the cooperation with the different government and civil society sectors including central and local level in the development and improvement of policies, strategiesk programmes, work plans, and legislation related to natural disaster and climate change management. They will be invited to be part of the technical working group in order to provide advice on disaster risk reduction.
Department of Forestry (DOF) Ministry of Agriculture and Forestry (MAF)	The Ministry of Agriculture and Forestry executes all land use decisions in the sector of agriculture and production forests. Within MAF, the key department that will be involved in the project is the Department of Forest (DOF) which is responsible for forest management planning, land use planning and land cover assessments.
Department of Planning (DOP) and Department of International Coordination (DIC) Ministry of Planning and Investments (MPI)	The MPI is the main planning body in the country, responsible for the socio-economic planning in the country through its Department of Planning (DOP). MPI develops the planning guidelines, instructs other ministries how to prepare their respective five year and annual plans, including investment programmes,issues the templates, detailed criteria elements, M&E and reporting frameworks for all planning processes in the country. It is also a coordination body for the risk management and recovery process. The MPI will have a key role in Component 1 of the project. The DIC is responsible cor coordination of all development assistance.
Provincial Forest Resource Management	Provincial Forest Resource Management will act as a coordination unit at the provincial level during the project forumulation and implementation It will responsible for coordinating and working with district authorities in carry out planned activities in the provincial and district level and report back to DFRM.

District Forest Resource Management	District Forest Resource Management will act as responsible party that will be implement the project activities in the selected districts in coordination and collaboration with Provincial Forest Resource Management.
Provincial and District Government agencies such as Provinical and District Land Management and Development of MONRE	These agencies will be engaged in the consultation of the design of integrated land use planning and GIS base modelling and implementing the plan together the provincial and district DFRM
Wider Public (including local communities, and NGOs)	The involvement of the wider public in sustainable forest and land management and ecosystem conservation is an important part of this project. The environmental NGOs experienced in certain aspects of the project will be involved as much as possible. Local community representatives will be involved in the development of Master Plans and communities will be involved in the incentive contracting scheme. The Wildlife Conservation Society (WCS) has worked in Lao PDR since the 1980s and applies both geographic and thematic programmic approaches. WCS has been working to develop and trial biodiversity offsets and Payment of Environmental Services (PES) with the mining and hydropower sectors in Lao PDR. In 2013, WCS submitted a biodiversity offset proposal to the MMG Sepon mine company, which would provide up to US$10 million to fund the management of the Laving Lavern NPA in Savannakhet Province. WCS will further assist in the setting up of the offset scheme under this project. The World Wide Fund (WWF) is working on Eld's Deer conservation in Dong Phou Vieng NPA and will cooperate under this project on village land use planning, public awareness and enforcement.
Private Sector	The project will engage private sector as much as possible. The investors will involve in the development and implementation of integrated land use plan for the target districts. They will also involve in the development of village development fund and identification and testing of sustainable financing mechanism that will be identified in the component 3 of the project.

A.3. Gender Considerations. Are gender considerations taken into account? (yes ☒ /no☐). If yes, briefly describe how gender considerations will be mainstreamed into project preparation, taken into account the differences, needs, roles and priorities of men and women.

Project preparation will ensure that gender consideration becomes an integral part of the proposed project strategy. During the project inception the mandatory UNDP gender marking will be applied. This requires that each project in UNDP's ATLAS system be rated for gender relevance. This will for example include a brief analysis of how the project plans to achieve its environmental objective by addressing the differences in the roles and needs of women and men. Furthermore, gender marking implies the production of the following data by the project's year 2 and by its end:

- Total number of full-time project staff that are women
- Total number of full-time project staff that are men
- Total number of Project Board members that are women
- Total number of Project Board members that are men
- The number of jobs created by the project that are held by women
- The number of jobs created by the projects that are held by men

In order to ensure equality, these criteria will be integrated into the project design.

A.4 Risk. Indicate risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, propose measures that address these risks to be further developed during the project design (table format acceptable):

Risks	Rating	Preventive Measures
Current institutions have inadequate capacity or resources to manage protected areas and the wider	Moderate	The project will review the capacities of the different actors on the project and ensure that the gaps identified will be addressed before project end. DFRM staff has limited capacity in collaborative approaches and in engaging the local community in PA and sustainable forest management; this capacity will be

landscape/forestscape		improved through tailored training and learning-by-doing. The project will also establish partnerships in the areas it will be working – this includes partnerships with local communities, NGOs and private sector. The local community and the private sector again lack capacities in PA and sustainable forest management, which will also be addressed through training, but also through engaging in the partnership management and learning from experienced PA and forest managers from DFRM and the NGOs.
Ecosystems are not sufficiently resilient and their biological and physical integrity are incrementally compromised by the effects of global and regional climate change	Low	The design of a more representative, comprehensive and adequate system for the conservation of forest and the species it hosts in the targeted areas of Savannakhet Province will seek to integrate the system needs into the country's evolving climate change adaptation strategy. This, combined with integration of forest management within the wider landscape will provide improved functional connectivity for species (both fauna and flora) to adapt to climate change. The removal of threats, pressures and stresses that impact the biodiversity of this region, will also ensure that ecosystems are more resilient to the impacts of climate change and therefore less vulnerable to its effects. Finally, site-level protected area managers, private sectors individuals and members of local communities will be trained to better understand the impacts of CC on biodiversity/ecosystems and to adopt conservation and management strategies for mitigating CC effects and enhancing resilience.
Conflicts and misunderstanding among public institutions, private sector partners, NGOs and resource users undermine partnership approaches and implementation of cooperative governance arrangements	Moderate	Where possible, formal agreements/MOUs will be used to define roles and responsibilities. Training will be provided to stakeholders on governance and conflict resolution. Activities will be designed and implemented in a win-win manner, beneficial to all, as far as possible. The sustainable development of the landscape will be emphasised with arguments that are supported with long-term economic forecasts.
Land owners/users flout planning regulations leading to mutiplication of illegal logging and forest degradation	High	The project targets strengthening of compliance monitoring and enforcement to reduce the risk of undesirable behaviours on the part of individual land users and owners. Establishment of landscape level management fora and landscape level planning though participatory planning processes, as well as robust implementation of monitoring mechanisms for biodiversity and ecosystem resilience will work towards minimizing the risk. A dialogue with local communities and businesss representatives (mininf, agriculture and forestry) will be undertaken as part of the process of regional integrated forest and land planning – to obtain industry and local communities buy-in and address other concerns,so as to improve compliance.

A.5. Coordination. Outline the coordination with other relevant GEF-financed and other initiatives:

The proposed project adds value to a number of related initiatives as set out below:
The *UNDP-GEF Improving the Resilience of the Agriculture Sector to Climate Change Impact (IRAS)* project seeks to improve the knowledge base about climate change, to strengthen agriculture and rural sector policies, and to develop institutional capacities in the provinces of Savannakhet and Xayaboury. The project aims to reduce the vulnerability of farmers to extreme flooding and drought events through the introduction of an applied ecosystem- based approach to agriculture. The *FAO-GEF Climate Adaptation in Wetlands Areas (CAWA) in Lao PDR* project is under the development for implementation between 2013-2018. The project intends to reduce climate change vulnerability of communities and the fragile wetland ecosystems upon which they depend. As both the projects, will be implemented in Savannakhet Province (different target sites), close collaboration will be needed. The *ADB-GEF Biodiversity Conservation Corridors* project focuses on the biodiversity rich forest landscapes of the Cardamom Mountains and Eastern Plains Dry Forest in Cambodia, Tri-border Forest areas located in southern Lao PDR, and the Central Annamites in Viet Nam. In Lao PDR, the implementation is under the Department Forest Resource Management of MONRE and across the boundaries of Xekong, Attapue and Champasak Provinces with total amount of $20 million. The project will strengthen government institutions and communities on the land use management, forest resource management, and biodiversity corridor protection. The project will address the fragmentation of the biodiversity rich forest landscape of southern Lao PDR, which imparis its ability to provide critical ecosystem services necessary for sustaining local livelihoods and investments in hydropower, transport, water and food-security enhancing sectors. The project will promote

sustainable resource use, and restore and enhance these productive landscapes. The *WB-GEF Protected Area Project (PAWP)* will create wildlife / PA enforcement standards, develop good practice applications, and learn successful schemes for PA management and reduction of illegal wildlife trade. The previous two projects both involve protected area management and close coordination and collaboration. A Technical Working Group will be established that ensembles technical experts on biodiversity and ecosystem conservation and all the related projects in Lao PDR will be represented on this group. Regular meetings will be held between the different projects to leverage synergies and ensure efficiency in implementing the projects. The studies conducted and information gathered under the other projects will be integrated into project development and implementation.

DESCRIPTION OF THE CONSISTENCY OF THE PROJECT WITH:

B.1 Is the project consistent with the National strategies and plans or reports and assessements under relevant conventions? (yes ☒ /no☐). If yes, which ones and how: NAPAs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, etc.:

The project is fully aligned with Lao PDRs' Seventh Five-Year National Socio Economic Development Plan (NSEDP), specifically as stated in one of the four overall targets: "Ensure sustainable development by integrating economic development with socio-cultural development and environment protection to the nation's advantage". The project will directly support the Lao People's Democratic Republic National Biodiversity Strategy to 2020 and Action Plan to 2010. More specifically, it directly supports implementation of two Programmes in the Strategy: (i) *Programme 2: Biodiversity Management* with a goal of "Improve biodiversity management and monitoring"; and (ii) *Programme 5: Institutional and Legal Frameworks* with a goal of "Adjust national legislation and regulations related to biodiversity and harmonised them with MEAs". The project is also aligned to the National Action Program on Combating Drought/Desertification (NAP) (1999) which has as main objectives food security, stabilization and reduction of slash-and-burn cultivation, conservation of watershed forests, enhancement of livelihoods of the farmers and poverty reduction.

In addition, the project will contribute to achievement of the Aichi Targets, in particular under the strategic goal B: Reduce the direct pressures on biodiversity and promote sustainable use, Target 5: By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced; Target 7: By 2020 areas under agriculture, aquaculture and forestry are managed sustainably, ensuring the conservation of biodiversity; and under strategic goal C: To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity, Target 11: By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine area, especially areas of particular importance for biodiversity and ecosystem services, and conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes, and Target 12: By 2020, the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has improved and sustained. The project is also in support of the Ten-year strategic plan and framework to enhance the implementation of the UNCCD convention (2008 – 2018) and contribute to Strategic Objective 1: To improve the living conditions of affected populations and Strategic Objective 2: To improve the condition of affected ecosystems.

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

A. Record of Endorsement[21] 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 SGP OFP endorsement letter).

NAME	POSITION	MINISTRY	DATE *(MM/dd/yyyy)*
Mr. Khampadith Khammounheuang	Director General Department of Environment Quality Promotion	MINISTRY OF NATURAL RESOURCES AND ENVIRONMENT	AUGUST 6, 2014

B. GEF Agency(ies) Certification

This request has been prepared in accordance with GEF policies[22] and procedures and meets the GEF criteria for project identification and preparation under GEF-6.

Agency Coordinator, Agency name	Signature	Date *(MM/dd/yyyy)*	Project Contact Person	Telephone	Email
Adriana Dinu, UNDP-GEF Executive Coordinator and Director a.i.		8/22/2014	Johan Robinson Regional Technical Advisor – EBD UNDP	+66-22802700	johan.robinson@undp.org

C. Additional GEF Project Agency Certification *(Applicable Only to newly accredited GEF Project Agencies)*
For newly accredited GEF Project Agencies, please download and fill up the required **GEF Project Agency Certification of Ceiling Information Template** to be attached as an annex to the PIF.

Annex 1: Carbon Calculations:

100,000 ha of HCVF identified and designate including provision of wildlife habitat and avoided GHG emissions of 2,779,039 tCO2-eq over a 10 year period

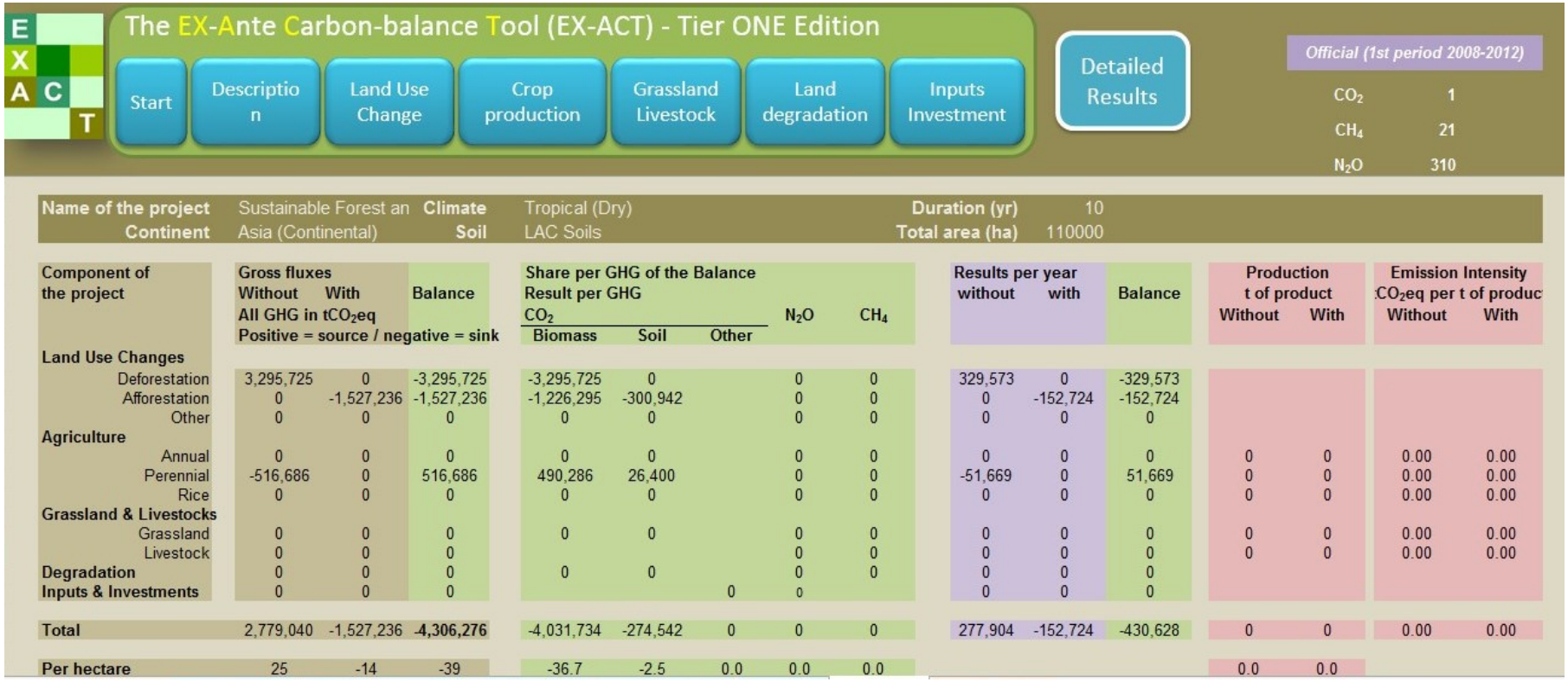
Establishment of HVCF will change regime from economic use to protection and this will reduce halt the deforestation in these areas. The Savannakhet Province has annual deforestation rate of 1.142857%. As a result of the project, 1,142.857 ha of deforestation will be prevented annually. Over a 10 year period this translates to 11,428.57 ha of deforestation prevented. The Ex-Ante Carbon-balance Toll (EX-ACT) Tier ONE Edition, developed by FAO was used for the calcultions. The forest type selected for the calculations is Tropical Dry Forests. For Harvested Wood Products (HWP), the above-ground biomass for Tropical Dry Forests is provided in Table 4.7 of IPCC 2006 Volume 4 (http://www.ipcc-nggip.iges.or.jp/public/2006gl/pdf/4_Volume4/V4_04_Ch4_Forest_Land.pdf) as 130 (100 – 160) tonnes dry matter/ha. A conservative figure of 100 tonnes dry matter/ha was used for this calculation. The HWP was therefore estimated as 3 tonnes dry matter/ha based on the advice "The resulting HWP fractions (of total biomass) were 10% for the developed world and 3% for the developing world" in Searle, S and Malins, C. 2011. Estimates of carbon storage in wood products following land clearing. ICCT http://www.theicct.org/sites/default/files/publications/ICCT_carbon_storage_in_wood_products_August_2011.pdf (Lao PDR falling within the developing world - 3%). The GHG emissions for preventing the clearing of forest are 3,295,725 tCO2eq over a 10 year period. However, after clearing, the land would have converted to either annual crops of perennial/tree crop. In the calculation, perennial tree crops were used and the carbon sequestrated by the trees was calculated as 516,686 tCO2eq over a 10 year period. The avoided GHG emission for the protection of 100,000 ha over a ten year period is therefore 2,778,039. This, however, will be studied in more detail during the PPG stage.

10,000 ha of degraded forests restored, ensuring sequestration of 516,686 tCO2eq over a 10 year period

[21] For regional and/or global projects in which participating countries are identified, OFP endorsement letters from these countries are required even though there may not be a STAR allocation associated with the project.
[22] GEF policies encompass all managed trust funds, namely: GEFTF, LDCF, and SCCF

1,527,236 tCO2eq over a 10 year period.

See FAO EX-ACT Calculations below.



The EX-Ante Carbon-balance Tool (EX-ACT) - Tier ONE Edition

Start | Description | Land Use Change | Crop production | Grassland Livestock | Land degradation | Inputs Investment | Detailed Results

Official (1st period 2008-2012)

CO_2	1
CH_4	21
N_2O	310

Name of the project	Sustainable Forest an	Climate	Tropical (Dry)	Duration (yr)	10
Continent	Asia (Continental)	Soil	LAC Soils	Total area (ha)	110000

Component of the project	Gross fluxes Without	With	Balance	Share per GHG of the Balance Result per GHG CO_2 Biomass	Soil	Other	N_2O	CH_4	Results per year without	with	Balance	Production t of product Without	With	Emission Intensity tCO_2eq per t of produc Without	With
All GHG in tCO_2eq Positive = source / negative = sink															
Land Use Changes															
Deforestation	3,295,725	0	-3,295,725	-3,295,725	0		0	0	329,573	0	-329,573				
Afforestation	0	-1,527,236	-1,527,236	-1,226,295	-300,942		0	0	0	-152,724	-152,724				
Other	0	0	0	0	0		0	0	0	0	0				
Agriculture															
Annual	0	0	0	0	0		0	0	0	0	0	0	0	0.00	0.00
Perennial	-516,686	0	516,686	490,286	26,400		0	0	-51,669	0	51,669	0	0	0.00	0.00
Rice	0	0	0	0	0		0	0	0	0	0	0	0	0.00	0.00
Grassland & Livestocks															
Grassland	0	0	0	0	0		0	0	0	0	0	0	0	0.00	0.00
Livestock	0	0	0				0	0	0	0	0	0	0	0.00	0.00
Degradation	0	0	0	0	0		0	0	0	0	0				
Inputs & Investments	0	0	0			0	0		0	0	0				
Total	2,779,040	-1,527,236	**-4,306,276**	-4,031,734	-274,542	0	0	0	277,904	-152,724	-430,628	0	0	0.00	0.00
Per hectare	25	-14	-39	-36.7	-2.5	0.0	0.0	0.0				0.0	0.0		