GEF-6 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:	Conserving biodiversity through sustainable management in production landscapes in Costa Rica		
Country(ies):	Costa Rica	GEF Project ID:[1]	9416
GEF Agency(ies):	UNDP	GEF Agency Project ID:	5842
Other Executing Partner(s):	MINAE	Submission Date:	March 21, 2016
GEF Focal Area(s):	Multi Focal	Project Duration (Months)	60
Integrated Approach Pilot	IAP-Cities ☐ IAP-Commodities ☐ IAP-Food Security ☐	Corporate Program: SGP ☐	
Name of parent program:	[if applicable]	Agency Fee ($)	636,435

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-4 (Integrating Biodiversity Conservation and its sustainable use into the productive land and marine sectors.; Program 9 (Management of the interface between humans and biodiversity)	GEFTF	3,602,968	13,440,000
LD2: Generate sustainable flows of forest ecosystem services, including sustaining livelihoods of forest dependent people Program 3: Landscape Management and Restoration	GEFTF	431,621	1,680,000
LD-3: Integrated Landscapes: Reduce pressures on natural resources from competing land uses in the wider landscape Program 4: Scaling-up sustainable land management through the Landscape Approach	GEFTF	431,621	1,680,000
SFM-1: Maintained Forest Resources: Reduce the pressures on high conservation value forests by addressing the drivers of deforestation	GEFTF	2,233,105	8,400,000
Total Project Cost		6,699,315	**25,200,000**

B. INDICATIVE PROJECT DESCRIPTION SUMMARY

Project Objective: To mainstream biodiversity conservation, sustainable land management and carbon sequestration objectives into production landscapes and urban biological corridors of Costa Rica						
Project Components	**Financing Type[3]**	**Project Outcomes**	**Project Outputs**	**Trust Fund**	**(in $)**	
					GEF Project Financing	**Co-financing**
Component 1: Favorable enabling conditions (policies, technologies, markets	TA	Enabling policy, institutional arrangements, community participation	Inter-Institutional agreement / Ministerial Decree formalizes the establishment,	GEF TF	2,333,755	8,400,000

[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 excerpts on *GEF 6 Results Frameworks for GETF, LDCF and SCCF*.
[3] Financing type can be either investment or technical assistance.

and finance) for delivering multiple global environmental benefits in managed production landscapes and urban biological corridors		and market conditions for delivering multiple global environmental benefits (GEBs) in production landscapes, resulting in: 1.1 Reduction in area converted annually from forest to other land use, from 21,707ha/yr to 354ha/yr, resulting in a net avoided deforestation and land degradation over the project area of 11,033ha. 1.2 Increased connectivity between production landscapes and protected areas contribute to the conservation of biological diversity *(Indicator, means of measurement, target and baseline tbd in PPG)* 1.3 The ability of the State to enforce the Forestry Law and generate economic incentives for maintaining ecosystem services is strengthened through: 1.3.1 Strengthened National Environmental Information System (SINIA) coordination through development of new services and products, financial sustainability, updated skills of staff, and development of internal quality control procedures. 1.3.2 A National System for Monitoring Land Use Change Dynamics (SINAMODICUT) publishes yearly maps	management arrangements and financial sustainability of the National System for Monitoring Land Use Change Dynamics (SINAMODICUT) including annual monitoring of change of forest cover and land degradation within agricultural production landscapes, and urban biological corridors of Costa Rica. Agreements with 15 institutions to provide updated georeferenced information to SINAMODICUT through the web-based National Territorial Information System (SNIT) on a yearly basis so imagery may be tied to land tenancy. An agreed long term inter-institutional financial sustainability strategy for long term funding of: i) forest cover monitoring services provided by the council of state universities (CONARE-PRIAS) for SINAMODICUT; ii) Continuous update of national cadaster by the National Registry so land tenancy records are visible through SNIT; iii) The continuous update of the SNIT web-tool by the National Geographical Institute (IGN). 200-2015 baseline study of total gain and loss of forest cover within production			

		tied to public land tenancy information showing: a. Total change of forest cover and land degradation per year within production landscapes at a national level b. Total land cover per year of pasture, bananas, palm oil determined through advanced classification and spectral signature technology at a national level. 1.4. Increased collaboration between institutions that form part of the National Forestry Authority, municipalities, community based organizations and the private sector to implement and evaluate progress of environmental planning at a national and local level verified through: 1.4.1 A 15% increase in the number of participatory ecological monitoring projects implemented jointly between institutions that form part of the National Forestry Authority entities and municipalities and /or community based organizations and/or private sector providing information to PROMEC, the National Ecological Monitoring programme. 1.4.2 Increased number of sustainable tourism operators, affiliated business and community organizations that have	landscapes. 2015 baseline study of total land cover of pasture, bananas, palm oil 2015. CONARE-PRIAS staff trained on the use of hiper-spectral cameras and remote sensor processing equipment and software for monitoring of forest and land use trends. SNIT online tool is updated and enhanced in new applications for users. National repository of information for of participatory ecological monitoring implemented collaboratively between public, private and civil society stakeholders and linked to PROMEC, the National Ecological Monitoring programme. At least 1000 sustainable tourism operators and affiliated business and community organizations trained on Ecological monitoring and Environmental Planning. 25% of agricultural, pineapple and pasture production units certified as deforestation free by MINAE At least 1000 international companies buying			

		signed MOUs to provide data for the Ecological Monitoring Plan (PROMEC) or contribute with actions of the National Biodiversity Strategy and Action Plan. 1.5 Commitment by main agricultural commodities buyers from international markets (Walmart, Tesco, Ahold, Rewe, EOSTA) sourcing from Costa Rica to prefer deforestation free production units and inform purchasing policies with SINAMODICUT.	commodities from Costa Rica aware of deforestation free certification.			
Component 2. Multiple global environmental benefits (biodiversity conservation, reduced carbon emissions and increased carbon storage) are delivered in production landscapes in the ACLAP buffer zone forest zone (Region 1) and urban biological corridor of Maria Aguilar (Region 2)	TA	**<u>Target Area 1: Amistad Pacific Conservation Area - ACLAP</u>** 2.1 of landscape management tools applied to over 2,700 hectares as follows: 700 ha of micro corridors; 2,000 ha of Silvo pastoral systems to increase connectivity between production landscapes and ACLAP's protected areas and contribute to the conservation of biodiversity (*baseline and target to be determined during the PPG phase).* 2.2 Increase of forest cover and carbon storage within in the ACLAP buffer zone's farms from 2015 forest cover levels, through adoption of best practices in livestock production and 50,000 trees planted as multi-strata live fences and of protection zones covering 100km leading to:	Strengthening capacity of local institutions supporting the sustainable management and conservation of production landscapes, including: Establishing 20 nurseries of endemic and native plants established support the landscape management tools Extension support to 100 farms to help them meet criteria for participation in sustainable value chains (Livestock NAMA) provided by Government, NGOs and/or private sector service providers Implementation of livestock NAMA MRV implemented for 100 farms. Extension of forest fire prevention programme	GEF TF	4,046,545	15,540,000

		(baselines to be determined at PPG phase) i) Percentage increase in biomass stocks of CO2eq *(baseline and target to be determined during the PPG phase)* ii) Reduction from 10% of CO2e emissions in 100 beef production farms under NAMA scheme. iii) 20% increase in area-weighted Environmental Service Index based on mammals. 2.3. Reduction in area converted annually from forest to other land cover, from 21,707ha/yr to 354ha/yr, resulting in a net avoided deforestation over the project period of 11,033ha. 2.4 The Land Registry Office capacity to formalize the land tenancy information within target Area 1 is increased as measured by the UNDP Capacity Development Scorecard *(baseline and target to be determined during the PPG phase).* 2.5 Additional annual income available to land tenants and farmers with certified forest cover gain within 2020-2025 (through achievement of PES, new price premium from differentiated agricultural sales, improved credit conditions from lenders acknowledging investment or reduced taxes by local or central	within ACLAP indigenous territories. Operationalizing biological monitoring programme in target areas. Finalizing 50 Km2 of land tenancy records within ACLAP buffer zone's productive landscapes and updating these onto SNIT Training and informing MINAE staff, municipal officials, judges and private producers about the SINAMODICUT and how to use it to enforce forestry law. Design of certification system for deforestation free productive units, discussed through multi-stakeholder workshops and introduced at pilot level within ACLAP. Pledging program with commodity buyers who make voluntary pledges to determine their purchasing policies based on information provided by SINAMODICUT maps (made available through SNIT) Agreements/and or contracts between purchasers and farmers regarding the sourcing of products produced in accordance with the generation of GEBs Signing of agreements by five municipalities			

		government) as compared to baseline income of 2017 *(baseline and target to be defined at PPG stage).* **<u>Target Area 2 Rio Maria Aguilar Inter-Urban Biological Corridor</u>** Increase of biological diversity, forest cover and carbon storage within the Maria Aguilar Inter Urban Biological Corridor (MAIBC) with 2017 forest cover levels as a baseline, through improved land cover monitoring as part of municipal law enforcement and promotion of best practices within MAIBC leading to: i) 1,000 hectares of landscape management tools (micro corridors, life fences, etc.) increase connectivity and conserve biodiversity within MAIBC *(Specific target to be reviewed during PPG stage).* ii) Percentage increase in area-weighted Environmental Service Index based on birds *(baseline and target to be determined at PPG stage).* iii) Percentage increase in biomass stocks of CO2eq *(baseline and target to be determined at PPG stage)* iv) 50 Km2 of land tenancy records within MAIBC are published through SNIT so municipal governments may link gain or loss of forest	from the Inter Urban Biological Corridor for joint action to control of waste and solid waste discharge into rivers, and foster the connectivity, conservation and rehabilitation of riverine forests. Formalized protocols for inter-institutional coordination to address complaints related to discharges, solid waste disposal, illegal construction and land-use changes on the banks of Rio Maria Aguilar 2015 baseline study of forest cover of MAIBC. Gain and loss of forest cover within MAIBC for years 2017, 2018, 2019 Baseline study of urban land cover (2015) as part of the annual monitoring by SINAMODICUT of urban land cover invasion over natural habitat Formalization and open audience of cadaster records by National Registry within MAIBC Training of MINAE, municipal officials, judges and private sector on how to use SINAMODICUT to enforce forestry law. Establishment of 20 nurseries support the landscape management tools			

		cover to land tenancy records on an annual basis v) Increased fines and sentences as a result of increased prosecutions of violations to land use change prohibition of Forestry Law Reduction in area converted annually from forest to other land cover *(baseline and target to be defined at PPG stage)* Increase in Knowledge, Attitude, Practices (KAP) indices (*to be defined at project start*) among 50,000 inhabitants of the Maria Aguilar Biological Corridor	20,000 endemic and native species of trees and shrubs are planted on the Maria Aguilar Biological Corridor Guidance documents and toolkits to inform future urban policy, capturing the experience and lessons learned from monitoring land cover change within MAIBC . The lessons of using SINAMODICUT to enforce forestry law and combat land degradation in pilot areas of ACLAP and MAIBC are incorporated into national guidance documents and capacity building programmes of: i) the environmental tribunal judges and prosecutors; ii) SINAC; iii) SINIA; iv) PRIAS and v) the National Registry			
			Subtotal		6,380,300	18,400,000
			Project Management Cost (PMC)[4]	GEF TF	319,015	1,260,000
			Total Project Cost		6,699,315	25,200,000

For multi-trust fund projects, provide the total amount of PMC in Table B, and indicate the split of PMC among the different trust funds here: ( )

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

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Amount ($)
Government	FONAFIFO FCPF Project	Grant	200,000
Government	FONAFIFO PES	Grant	1,000,000
Government	National Direction of Water	Grant	3,000,000
Government	SINAC	Grant	9,000,000
Government	SINAC	In Kind	1,000,000

[4] 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.

Government	Ministry of Agriculture and Livestock	Grant	2,000,000
Government	Ministry of Environment and Energy MINAE-CENIGA	Grant	1,000,000
Government	National Institute of Water and Sewages (AyA)	Grant	2,000,000
Government	National Geographic Institute (IGN)	Grant	1,000,000
Private Sector	CORFOGA	Grant	1,000,000
CSO	CRUSA Foundation	Grant	1,000,000
Government	National Power and Light Company	Grant	1,000,000
Universities	CONARE PRIAS	In Kind	2,000,000
Total Co-financing			**25,200,000**

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	Costa Rica	Biodiversity	ODS	3,602,968	342,282	3,945,250
UNDP	GEFTF	Costa Rica	Land Degradation	ODS	863,242	82,008	945,250
UNDP	GEFTF	Costa Rica	Sustainable Forest Mangement	SFM	2,233,105	212,145	2,445,250
Total GEF Resources					**6,699,315**	**636,435**	**7,335,750**

a) Refer to the Fee Policy for GEF Partner Agencies.

E. PROJECT PREPARATION GRANT (PPG)[5]

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

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

Project Preparation Grant amount requested: $150,000				PPG Agency Fee: $14,250			
GEF Agency	Trust Fund	Country/ Regional/Global	Focal Area	Programming of Funds	(in $)		
					PPG (a)	Agency Fee[6] (b)	Total c = a + b
UNDP	GEFTF	Costa Rica	Biodiversity	ODS	50,000	4,750	54,750
UNDP	GEFTF	Costa Rica	Land Degradation	ODS	50,000	4,750	54,750
UNDP	GEFTF	Costa Rica	Sustainable Forest Mangement	SFM	50,000	4,750	54,750
Total PPG Amount					**150,000**	**14,250**	**164,250**

F. PROJECT'S TARGET CONTRIBUTIONS TO GLOBAL ENVIRONMENTAL BENEFITS[7]

Provide the expected project targets as appropriate.

[5] PPG requested amount is determined by the size of the GEF Project Financing (PF) as follows: Up to $50k for PF up to$2m (for MSP); up to $100k for PF up to $3m; $150k for PF up to $6m; $200k for PF up to $10m; and $300k for PF above $10m. On an exceptional basis, PPG amount may differ upon detailed discussion and justification with the GEFSEC.

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

[7] 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. There is no need to complete this table for climate adaptation projects financed solely through LDCF and/or SCCF.

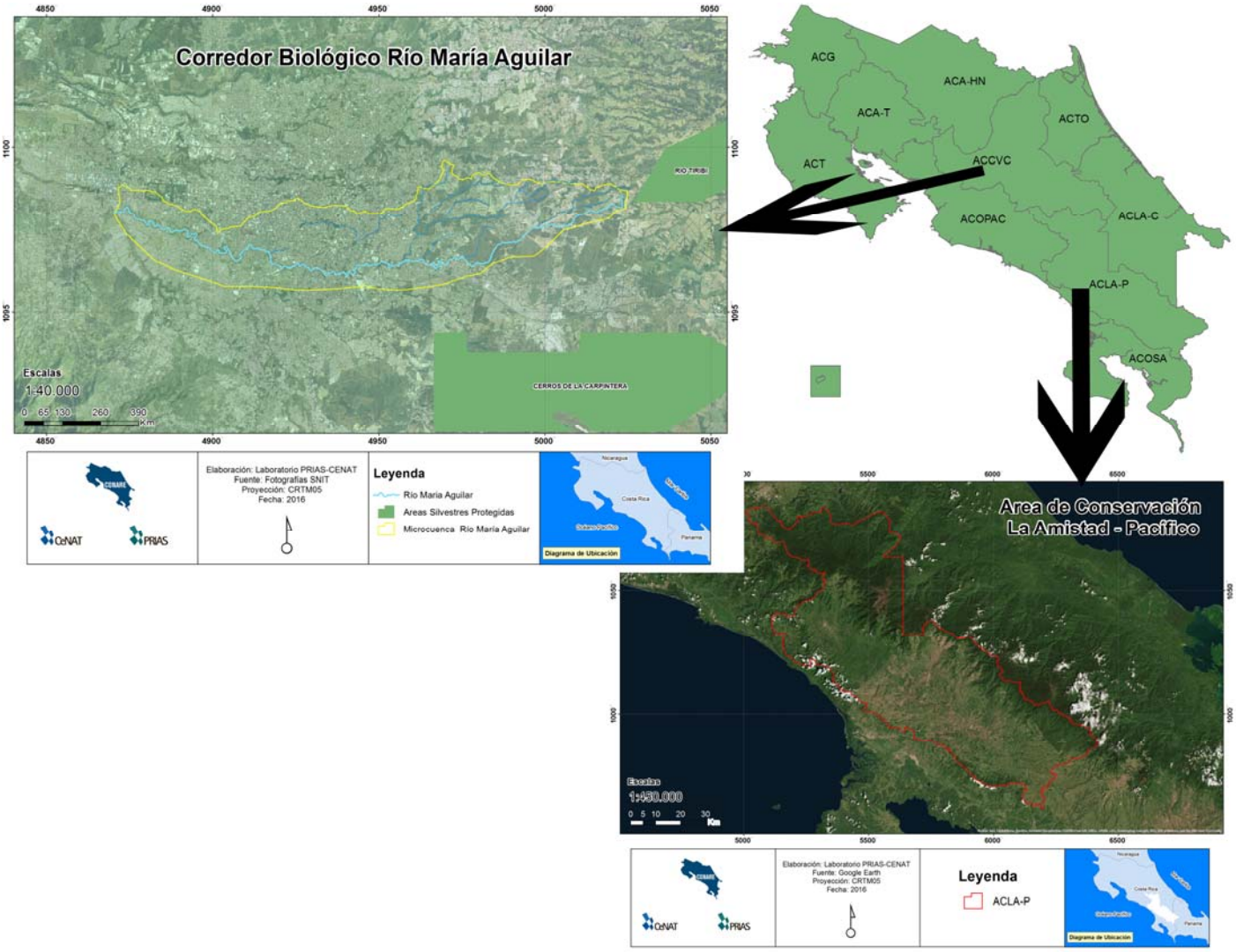
Corporate Results	Replenishment Targets	Project Targets
1. Maintain globally significant biodiversity and the ecosystem goods and services that it provides to society	Improved management of landscapes and seascapes covering 300 million hectares	*11,033Hectares*[i]
2. Sustainable land management in production systems (agriculture, rangelands, and forest landscapes)	120 million hectares under sustainable land management	*2,700Hectares*[ii]
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)	*TBD CO2e metric tons*

PART II: PROJECT JUSTIFICATION

1. *Project Description.* Briefly describe: 1) the global environmental and/or adaptation problems, root causes and barriers that need to be addressed;

The project strategy will have a nationwide impact triggered by national policies and action on the ground. It aims to deliver Global Environmental Benefits by promoting a dynamic multi-sectorial management process of official environmental information, in order to increase collective action for the conservation and sustainable use of biodiversity through sustainable land-use management in rural and urban landscapes. This premise will be tested in the production landscapes of La Amistad Pacifico Conservation Area (ACLAP) and the Inter-Urban Biological Corridor of María Aguilar River in San Jose (MAIBC) covering 619,162 hectares (449,546 hectares of production landscape within ACLAP, and 169,616 hectares of biological corridor in MAIBC).

The project will focus on reducing the loss of natural habitat triggered by rapid and uncontrolled land use change due to agricultural expansion in Target Area 1 (ACLAP), and in Target Area 2 (MAIBC) for urban growth. The project will strengthen the National Environmental Information System's (SINIA) capacities to generate annual data that can be used by public and private stakeholders to address threats to biodiversity. The strategy aims to establish an annual dynamic of response to specific threats: At the rural level, firstly, by enhancing SINAC's capacity to detect and process forestry law violations and secondly, by improving the supply and demand of sustainable goods where farmers are supported by an improved flow of information and the provision of tools for responsible commodity buyers and producers. At an urban level, threats will be offset by catalyzing response and community action to help control habitat loss and contribute with forest connectivity and biodiversity conservation.



According to the VI National Agricultural Census (CENAGRO VI), finalized by the National Institute of Statistics and Census (INEC) in June 2014, the production landscape of Costa Rica was comprised of 93,017 farms, equivalent to 2,406,418 hectares dedicated to agricultural and animal production and representing 47.1% of the national territory. Table 1 summarizes the land uses in productive landscapes as detailed by the Census.

Table 1

Total # of farms	Extension Has	Arable land (annual crops)	Permanent Crops	Pasture	Forests	Other
93,017	2,406,418.4	167,133.4	377,214.2	1,044,909.6	736,505.2	80,656
	%	**6,9**	**15,7**	**43,4**	**30,6**	**3,4**

The table shows how the dynamic of change between the main three land uses (forest, pasture and permanent crops) is the most important trigger of natural habitat and biodiversity loss in the country. This the problem that the project will address through generating an enabling environment for multi-stakeholder action to combat habitat loss at the national level, but also through two targeted interventions:

Target Area 1 (ACLAP): Is one of the 11 Conservation Areas of Costa Rica, conserving important biodiversity including a UNESCO World Heritage site (La Amistad International Park) and two Key Biodiversity Areas (Birdlife identified IPA-CR011 Los Santos La Amistad Pacífico and IPA-CR009 Cordillera de Talamanca). It is located in the south western part of the country, extending from the Orosí Valley continuing along the Talamanca Cordillera until the border with Panama. It includes the municipalities of El Guarco, Paraíso, Jiménez, Pérez Zeledón, Buenos Aires and Coto Brus and has a total area of 801,900 hectares. ACLAP has the following protected areas: Tapantí Macizo de la Muerte National Park (PNTMM), Chirripó National Park (PNCh), Amistad National Park (PILA); Las Tablas Protected Zone; Rio Macho Forest Reserve and Rio Navarro, Rio Sombrero Protected Zone. These protected areas comprise 352,354 hectares. The Conservation Area has a wide-range of ecosystems and high endemism, due its wide altitudinal range, diverse climate and variety of soil types. The PILA National Park is the largest terrestrial protected areas in Costa Rica and protects the largest continuous mass of unaltered tropical forest in the country. ACLAP is also strategically important for its water production, both for human consumption for the Greater Metropolitan Area, as well as for hydroelectric energy (Orosi and Reventazon Rivers).

Target Area 2 (MAIBC): Rio Maria Aguilar Inter-urban Biological Corridor Is a green area consisting of a variety of different land uses. It contains part of one the only Key Biodiversity Area within an urban area in Costa Rica. Birdlife designated El Rodeo, Cerros de Escazu y La Carpintera as an Important Bird Area IPA-CR008, because important migratory birds cross over the area or make use of stopover sites for resting, feeding or overwintering. It possesses 447.78 ha of secondary forest in the districts of San Ramon and Concepción, in the upper basin of the Maria Aguilar River and in areas close to the Tiribí and Cerros de la Carpintera Protected Zone; the fragmented secondary forest is associated with areas closer to the rivers, and has an area of 287.07 ha located throughout the Maria Aguilar River and its tributaries, with the highest-density areas near the river Ocloro. Pastures represent the area´s largest vegetation cover with 781.52 ha, enabling a system of interconnection and interdependency. The Biological Corridor also has systems of scrublands with an area of 19.36 ha located mostly in the districts of San Ramón and Concepción; finally, the urban green areas, consisting of parks and small green areas located in urban zones, represent an area of 47.52 ha.

Problem and Threats:
The success story of forest recovery in Costa Rica contrasts with the rapid growth of agricultural sectors in rural areas, threatening wetlands and private forests. Export crops such as pineapple, and crops for domestic consumption such as palm oil or pasture for beef have expanded at a rate that has surpassed the capacity of central and local governmental entities to control and reduce the negative impacts on biodiversity. The inability to monitor and control the loss and degradation of forests, adjacent to and within production landscapes, constitutes a persistent threat to Costa Rica's globally recognized conservation efforts.

The rapid expansion of cash crops has been parallel to the rapid expansion of urban areas. In the last twenty years, Costa Rica has passed from being a predominantly rural society to being an urban society. Urban areas now constitute the second most significant threat to Costa Rica's biodiversity, as forest cover is eliminated to make way for residential areas. The lack of government capacity to enforce protection zones within private lands, and the ineffective attention given by municipal authorities to protect rivers, generates further problems such as pollution and solid waste dumping that, during the rainy season, frequently leads to flooding.

While some records indicate that Costa Rica is recovering its tree coverage, in fact it continues losing forests. From 2000-2015, the country lost between 144,398 and 224,406 hectares. One of the key causes of deforestation identified by FONAFIFO include the high opportunity cost associated with competing land uses. Thus, it is more likely for pineapple production ($8,000/Ha/Year) to displace forest than for yucca ($1500/Ha/Year) to do so. In Costa Rica deforestation is closely related to the high opportunity cost of unsustainable cattle ranching and agriculture. Factors, such as household income, labor availability and educational levels can also marginally affect decision making when it comes to determining land use change.

The national parks and protected areas suffer less deforestation because the opportunity cost or perceived rent of their land is lower than that of private forests. The greatest rate of deforestation has been found to be in forests of early regeneration, followed by forests of medium regeneration and older forests or late regeneration. The different rates of deforestation respond to the fact that early forests are those growing on

current pastureland belonging to private owners, and are therefore more likely to be eliminated, while mature habitat, if established as a forest according to the national definition under the Forestry law, may not be eliminated. Agricultural lands are where the greatest loss of regenerated forests are to be found.

Since 2005 over 50% of the country's forest cover was located in private lands. Compared to protected areas, privately held land offers better income opportunity and so within this, occurs the highest rates of deforestation. This is true for all ages of forest cover; from those in early stages of regeneration to older-growth forests. New forest is therefore only strata that presents a net loss of coverage. At the same time, it was responsible for 55% of carbon capture for the period 2000-2005. Moreover, an estimated 650,000 ha of land being used for agricultural production has the capacity for forestry usage. Situations such as the higher opportunity cost for land of early forests, the weakness of the state to enforce environmental legislation and policies that diminish the competitiveness of forestry production, encourage the preference for agricultural usage over forestry use, even when soils are not apt for agricultural production. To mitigate this, the logical answer is for the creation of incentives to stimulate the increase in forest cover in private productive landscapes, which can generate additional income to small farmers. If deforestation is closely related to the alternative opportunity cost of land, economic incentives to regenerate forest need to be proffered. Monitoring land use change in agricultural lands linked to tenancy is a necessary starting point to assist future regeneration incentives.

At the same time as Costa Rica was conserving forest through its national protected area system, it was increasing the size of its cities and its productive landscapes were shifting to cope with more a diverse export base with more externalities. The government systems attempting to cope with these changes have been insufficient and Costa Rica is currently experiencing the following issues:

Threats	Effect on Biodiversity / Land Degradation
Uncontrolled urban growth and land use change	Rapid expansion of residential and commercial land uses into river margins, green tracts (fragmented secondary forest) and restricted zones: In 2005, the area comprising the RMAIBC had 448.65 km2 of fragmented secondary forest and 59.03 km2 of secondary forest, 507.68 km2 in total. By 2015, this tree cover had been reduced to 334.03 km2 (130.49 km2 of fragmented secondary forest and 203.54 km^2 of secondary forest). Illegal occupation of riverbanks by impoverished families presents a high risk, hinders biodiversity development and fragments the landscape. This is an urban area with very few green spaces, and a fragmented forest cover. Insufficient connectivity of make it a vulnerable space for organisms, which suffer from the need to adapt to highly altered urban ecosystems.
Expansion of unsustainable agricultural practices, especially cattle ranching and cash crops (pineapple and oil palm)	Between 1987 to 2013, seven out of every ten hectares deforested became pasture land. Other crops for the domestic (rice, beans etc.) and international market (pineapple, banana, African palm) directly caused two out of ten hectares of forest loss. In the PILA National Park buffer zones, pineapple and African oil palm, which have witnessed a significant and increasing in recent years. Cattle ranching impacts heavily in indigenous areas. This rapid, uncontrolled expansion and the use of unsustainable practices (large scale land clearing for monoculture, excessive use of chemical pesticides and fertilizers) has led to habitat loss, soil erosion and degradation and the fragmentation of forests, with negative impacts on connectivity and ecological integrity.
Forest Fires	The use of fire is a very destructive practice widely used in local agriculture, reducing the forest cover and putting at risk the integrity of the area's natural resources and water supply. According to SINAC figures, 5,070 hectares were affected by forest fires in 2015. In Cabagra, Ujarrás and Salitre (indigenous territories in ACLAP), non-indigenous landowners tend to use this technique to the detriment of the local indigenous population and the ecological well-being of these territories. Without doubt the expansion of cattle ranching and its accompanying management practices is one of the main drivers of deforestation and ecological disintegration in this region
Deforestation and degradation of forests and mangroves forests due to conventional production practices.	It is estimated that 18% of mangroves have been lost in the last 13 years. The cultivation of crops such pineapple is often associated with the high use of agrochemicals, applied directly to the crops which run off into wetlands. The excess water from irrigation that enters wetland systems is also altering the natural hydrological dynamics of some wetlands. Furthermore, the agricultural and cattle ranching frontier continues to expand in many areas for the production of pineapple, rice, cattle, palm, among other products, resulting in development of canals, drainage of wetlands, and loss of habitat.

The long term solution
The long-term solution to mitigate the prevailing threats to biodiversity is to promote an iterative process of sustainable management of landscapes to ensure sustainable production practices and connectivity between these landscapes and protected areas. This process will be supported by a nationwide institutional analysis and response to threats by institutional decision makers, private sector and civil society using a geo-environmental information system. This will help mainstream biodiversity into production practice and manage sustainable land, forests and biological corridors effectively.

Project baseline
The baseline projects are valued at US$ 25,200,000 over 5 years. It may be broken in two parts, based on the sources of funds as described below:

Investments by the National Government:
In 2013 the Ministry of Environment and Energy created the National Environmental Information System, (SINIA), coordinated by the National Center for Geo-environmental Information (CENIGA). It has the mandate to coordinate a national network of environmental information and liaison with all national institutions generating environmental data and supporting the development of MRV systems as well as information clearing houses to comply with all multilateral environmental agreements. For the expected time frame of the project SINIA has agreed to provide co-finance resources amounting to US$ 2,000,000 mostly as in kind co finance for institutional coordination of project activities.

The National Territorial Information System (SNIT) is a core decision-making tool for land use planning of SINIA. It is administered by the National Geographic Institute which manages an online tool that makes public maps showing territorial information. As this tool is linked to the National Registry it is possible to associate land tenancy records with layers of maps that may be developed over time. The National Geographic Institute will provide in kind co-finance of $1,000,000 for this project, related to maintenance of the web tool and support for the strengthening of the role of SNIT within SINIA.

The National Water Directorate is developing the National Information System for Integrated Water Resources Management (SINIGIRH), which is another node of information of SINIA. SINIGIRH manages information related to integrated water management by national institutions. The first phase of project entailed an investment of $2,599,780 between 2014 and 2016 to produce: i) A national monitoring network of watersheds, that provides accurate and timely information for decision making processes; and ii) an online web portal to manage information and data relating to water resources and their management. The second phase of this project aiming to scale up monitoring at a national level, will entail an additional US$4,000,000 to be implemented when? Is this amount cofinancing for our project too?

The National Registry has invested US$ 2,700,000 to develop the Land Registry Information System (SIRI). This investment allows access to tenancy information via SNIT web portal. During project implementation the National Registry will provide US$ 2,000,000 in co-finance to support its national cadaster programme in target areas.

The work of SINAC within the ACLAP and ACCVC (MAIBC) areas to legally process violations to environmental legislation and support participatory process for reforestation and ecological monitoring constitute a notable baseline investment. In the past SINAC relied on information by community organizations, private citizens and its limited resources to survey production landscapes fully. With regular access to imagery of forest cover gain and loss that is tied to tenancy the processing of fines will become an easier endeavor. As a result during project implementation SINAC is committed to maintaining close coordination with the project and the development of SINAMODICUT. The resources committed to this task over 5 years are estimated in US$10,000,000.

The National Forestry Financing Fund (FONAFIFO) established a programme for Payment of Ecosystem Services. This is the most effective economic incentive for maintaining ecosystem services in the country, and, as such, generates a significant baseline condition for this Project as an economic incentive to help land tenants shift to usages with increased forest cover. Throughout project implementation the PES scheme will continue and is expected to generate US$ 1,000,000.

The process for drafting the REDD + Strategy for the Forest Carbon Partnership Facility (FCPF) in Costa Rica was formally assigned to the FONAFIFO. FONAFIFO has managed two Target Support grants totaling US$400,000. The second Target Support funded $100,000 for the baseline map of total pineapple cover which will be ready by June 2016. In addition, FONAFIFO will use US$200,000 FCPF resources for the development of baseline maps for one more agricultural commodity during the lifetime of this GEF investment.

Since 2012 the Ministry of Agriculture, the Ministry of Environment and Energy, and the Livestock Corporation (CORFOGA) have been implementing a national pilot plan for low carbon emission beef and dairy production, with an investment of US$ 930,000. The pilot plan has tailored an extension support package servicing 100 farms in the BRUCA region (most of which falls within the ACLAP Conservation Area) to help producers shift practices and make them more environmentally and financially sustainable. This project will replicate the tailored extension support package that has already generated emissions reductions in these pilot farms through a combination of grazing, rotation, breeding and ecosystem restauration practices by trained farmers. As such will receive in kind co-finance by CORFOGA and MAG of over 1,000,000 during implementation of this GEF project.

Investment by international cooperation (non-GEF)

The Second Vice Presidency, the Ministry of Environment and Energy and Ministry of Agriculture and UNDP's Green Commodities Programme established in 2011 the *National Platform for Responsible Production and Trade of Pineapple* to guide multi-stakeholder action to increase the sustainability within this supply chain through a National Action Plan that has recently been made official by the president. Out of this dialogue process the concept for a system of monitoring land use cover within production landscapes tied to land tenancy was developed. Therefore the Green Commodities programme will provide co-finance during project implementation to support domestic dialogue with producers for the value of US$200,000 to help advance the system and other National Action Plan tasks addressed by this project.

The Biodiversity Finance Initiative (BIOFIN) has been active in Costa Rica since 2014, it is led by an Inter-viceministerial committee with participation of the Vice Ministers of Environment, Finance and Planning who meet on a regular basis to review policies and institutions relevant managing biodiversity finance information. In Costa Rica BIOFIN has supported the finalization and costing of the National Biodiversity Strategy and Action Plan which will help guide interventions of this project. For this purpose BIOFIN is intended to invest an additional US$100,000 in technical assistance to finalize the above mentioned action plan, which will help guide actions of this project too. This will help institutionalize the work of the inter-viceministerial committee by setting up a platform to manage environmental financial information, this platform will have to interact with SINIA.

BARRIERS TO ACHIEVING THE PROPOSED LONG TERM SOLUTION

The policies, technologies, markets and finance available to combat habitat loss, deforestation and degradation are not articulated into a coherent national system.	There is no articulation between entities and investments that -if combined- could combat the land degradation and forest cover change that results from agricultural expansion and urban growth. The land tenancy record of the National Registry cadaster is neither equipped nor consulted for environmental planning exercises. Institutions generating environmental information are not using the National Territorial Information System web tool to publish their GIS data. The expertise of PRIAS for processing remote sensing imagery is neglected and instead institutions, companies and NGOs rely on expensive foreign hired services to process imagery on a case by case basis. The civil servants and park rangers of SINAC who have the mandate of documenting and processing illegal habitat loss are doing so through sporadic field inspections, and with little use of GIS information. Finally, the globally prestigious system of economic incentives for land owners that FONAFIFO has established, is not sufficient incentive for commodities producers to increase forest cover within private land.

	Institutions that manage environmental information develop independent systems that are not articulated to other public entities. Also, this information is not updated regularly. There has been a tendency for institutions to strengthen and grow their GIS departments, with the unfortunate result of duplication of efforts, and atomization of roles that have affected the availability of easy to use environmental information. The consequence is that environmental information is not being used effectively by SINAC or Municipal authorities to guide prosecution of forestry law infringement. Public institutions, civil society and the private sector continue working in silos.
Insufficient ability of institutions, the private and civil society sectors to work together for sustainable management of production landscapes, urban corridors and connectivity between landscapes and protected areas.	Participatory processes in the country are rarely multi-sectorial. While participatory processes are used and promoted, they only target a few stakeholders from civil society or public organizations. There are no examples of articulated multi-sectoral and multi-institutional participatory efforts to address the current threats to biodiversity effectively and efficiently. Currently SINIA is unable to guide actions to combat forest degradation and habitat loss in specific settings. There is no regular publication of forest cover and land use change by the Ministry of Environment, and the existing information is developed by institutions generating maps for specific conservation areas, or only targeted to their specific mandate (maps of wetlands only, or protected areas only). In addition, this information is not published on one centralized map management tool to facilitate a comprehensive analysis of land use change. Consequentely, land planning efforts are limited in scope and impact. The Ministry of Agriculture must wait between 10-30 years to update its land use records every time an agricultural census is hired, so there is no reliable information of the land cover size of specific crops on an annual basis. As a result it is very difficult to prosecute violations to forestry law in rural settings because of agricultural growth or in urban settings because of habitat loss caused by increased urbanization.

3) The proposed alternative scenario, GEF focal area[8] strategies, with a brief description of expected outcomes and components of the project

The project will add value to existing baseline investments by triggering a dynamic of multi-sectorial management of official environmental information, in order to increase collective action to protect biodiversity affected by land use change in rural and urban landscapes in Costa Rica. The project will invest in SINIA to harness different institutional information providers; in SNIT, for publishing information linked to land tenancy records; in PRIAS to generate maps of gain and loss of forest. It will strengthen SINAC's capacity to enforce environmental regulations and facilitate community development and FONAFIFO's ability to channel economic investments for increased forest cover. It will strengthen MAG's capacity to implement an extension service aimed at improving sustainable production practices: All these actors will be working together with farmers and other stakeholders on the ground for a wider aim of reducing natural habitat loss and promoting biodiversity conservation.

In this way, the project will contribute to achieving the CBD Aichi Targets, specifically Targets 5, 7, 11 and 14, which relate to halving by 2020 the rate of loss of all natural habitats; managing sustainably areas under agriculture; fostering conectivity of Protected Areas; and the restoration of ecosystems. The project is aligned with GEF Focal BD 4, LD2 (Programme 3), LD3 (Programme 4), and SFM-1 (Programme 9). By consolidating SINIA and strengthening multi-stakeholder collaboration to tackle habitat loss, the project will also be supporting the generation of sustainable flows of forest ecosystem services, will be restoring

[8] For biodiversity projects, in addition to explaining the project's consistency with the biodiversity focal area strategy, objectives and programs, please also describe which Aichi Target(s) the project will directly contribute to achieving.

ecosystems, reducing pressures on natural resources from competing land uses and will be scaling-up sustainable land management by addressing the drivers of deforestation.

Component 1: Favorable enabling conditions (policies, technologies, markets and finance) for delivering multiple global environmental benefits in managed production landscapes and urban biological corridors

The project will invest on a long-term enabling environment for delivering multiple global environmental benefits in production landscapes. The project's aim is to conserve biodiversity by reducing change from forest to other land uses, from 21,707ha/yr to 354ha/yr, resulting in a net avoided deforestation over the project period of 11,033ha. To contribute to this goal, the project will consolidate an environmental decision making information system, to be applied on a yearly basis. Decree N° 37658-MINAET names the Centre for Environmental Geographical Information (CENIGA), as the coordinating entity of the National Environmental Information System (SINIA). Therefore, the project will invest in strengthening the role of CENIGA, so that it may fulfill its mandate as the regulatory body and hub for the diverse institutions that provide environmental information. During the PPG phase a capacity assessment will take place to specify terms of reference of support to CENIGA.

One of the expected outputs of the technical support for CENIGA, will be an inter-institutional agreement, or Ministerial Decree, that formalizes the establishment, management arrangements and financial sustainability of the National System for Monitoring Land Use Change Dynamics – SINAMODICUT. This is a new system, being developed for SINIA, that will allow for the annual monitoring of gain and loss of forest cover within agricultural production landscapes and urban biological corridors of Costa Rica. At least 15 institutions and MINAE (including the National Land Registry) will formalize agreements to provide updated geo-referenced information to SINIA and SINAMODICUT, through the National Territorial Information System (SNIT) web-based visor, on a yearly basis, so that imagery may be tied to land tenancy. The project will contribute to the development of SINAMODICUT, so that it will have the capacity to publish yearly maps tied to public land tenancy information showing forest loss and gain, as well as advanced classification and spectral signature technology enabling the mapping of specific land use coverage (pasture and selected crops). This component will enhance capacities to monitor land use change in private productive lands with an emphasis on forest loss and gains through the annual (or bi-annual) publication by PRIAS of maps, made available through the National System of Territorial Information (SNIT) of the National Geographical Institute.

The project will acquire equipment for the PRIAS laboratory, and provide training to all relevant interested parties in the use and application of the information provided. In the specific case of this project, training will necessarily be provided to MINAE/SINAC staff (Forestry Control and Environmental Damages); municipalities (at a planning and environmental control level) and members of the judicial system (for the legal processing of infractions). It will also support the Ministry of Environment to negotiate, with other institutions, an agreed long term inter-institutional financial sustainability strategy for funding of this model information system. These include the financing of the forest cover monitoring services provided by the Council of State Universities (CONARE-PRIAS) to SINAMODICUT.

The second key element, for achieving a reduction in the loss of forest habitat, is greater engagement and cooperation between public and private actors for the implementation and evaluation of environmental planning, at a national and local level. These stakeholders will include the National Forestry Authority, municipalities, community-based organizations and the private sector (including the sustainable tourism sector), in order to involve these in participatory ecological monitoring projects, as a means to enhancing the information provided to the National Ecological Monitoring programme - PROMEC. An integral part of this will be the development of a user-friendly virtual repository of information. Training events will also reach out to at least 1,000 tourism sustainable tourism operators and affiliated business and community organizations on ecological monitoring and environmental planning and participation in Costa Rica.

The role that markets play in combatting habitat loss will also be targeted. Through support from UNDP's Green Commodities Programme, the project will engage with the main international agricultural sourcing and commodity buyers in Costa Rica (Walmart, Tesco, Ahold, Rewe, EOSTA, among others), in order to identify

ways by which their purchasing policies may help implement the vision of the National Development Plan and the National Biodiversity Policy and Action Plan. Key elements on the table for discussion, include reward mechanisms (preferential buying schemes) for those producers with a "deforestation-free" record for the baseline period 2000-2015. This information will be provided for by SINAMODICUT. The project will reach at least 1,000 international companies buying commodities from Costa Rica by organizing public speaking events at trade shows, sustainability forums and ODS compliance events organized by the UN. The sales pitch to companies will promote their preference for deforestation free sourcing.

For this purpose, the project will help design a deforestation-free production unit certification scheme to be issued by MINAE. This certification mechanism would not imply additional costs to producers and land tenants, as once established, SINAMODICUT will be able to provide yearly updates of the farms that show no forest loss. As such, the full cost will already be incorporated into the functioning of the information system. The project will invest in the design of the certification standard and operational manuals which will be promoted amongst producers domestically, and particularly within the targeted areas for intervention. International companies' and national producers' awareness of the "deforestation-free certification programme" will be assessed continuously during project implementation.

A final output of this component, is the monitoring, evaluation, systemization and dissemination process of the experiences, lessons learned and best practices at a national and international level, as the approaches promoted under this component are considered to be innovative and worthy of further development.

Component 2 - Multiple global environmental benefits (biodiversity conservation, reduced carbon emissions and increased carbon storage) are delivered in production landscapes in the ACLAP buffer zone forest zone (Region 1) and urban biological corridor of Maria Aguilar (Region 2)

Key elements of the previous component such as the periodic monitoring of land cover change and the set up of a certification of deforestation-free production units will be piloted in ACLAP and Maria Aguilar River Urban Biological Corridor with the assistance of government officials, especially, forestry officers and private landowners – including cattle, pineapple and palm oil producers. In addition, under Component 2, the project will work with local partner organizations, indigenous groups, agricultural associations and non-state actors on innovative approaches to agricultural production at a small and medium farm level, as a learning approach to offset threats and share knowledge.

The project will introduce best sustainable practices to farmers, including landscape management tools such as micro-conservation corridors, live fences, and agroforestry/silvopastoral systems, in order to increase connectivity between production landscapes and ACLAP's protected areas[9] and contribute to the conservation of biodiversity. This will be achieved through the establishment of nurseries to produce endemic and native plants and the insertion of cattle producers into sustainable value chains (Livestock NAMA) supported by extension support services implemented by Government, NGOs and/or private sector service providers. Training and exchanges will take place (such as with the Tortuguero Conservation Area (ACTo) which has promoted, for several years, integrated farm models).

Forest fires have affected other areas in ACLAP such as Macizo la Muerte, San Geronimo, Chirripo, as well as the three indigenous territories located near to Buenos Aires. The project will consolidate the forest fire prevention programme started by SINAC in the Cabagra indigenous territory to other areas through training, awareness programmes and equipment. This action will be closely monitored and its results systemized and reported upon.

This component will also look to increase the Land Registry Office's capacity to formalize the land tenancy information within ACLAP, as measured by the UNDP Capacity Development Scorecard by incorporating 50 Km^2 of land tenancy records within ACLAP buffer zone's productive landscapes into SNIT and training provided to MINAE staff, municipal officials, judges and private producers on how to use SINAMODICUT to enforce the Forestry Law.

[9] (Tapantí Macizo de la Muerte National Park (PNTMM), Chirripó National Park (PNCh), Amistad National Park (PILA); Las Tablas Protected Zone; Rio Macho Forest Reserve and Rio Navarro, Rio Sombrero Protected Zone)

Finally, with regard to ACLAP, the project will seek to design an innovative incentive scheme to be discussed and agreed upon with private landowners. A certification scheme and options for incentive mechanisms for "deforestation-free productive units" could be awarded. Also mechanisms such as a new price premium from differentiated agricultural sales and improved credit conditions from lenders acknowledging investment or reduced taxes by local or central government, will be explored.

With regards to the Maria Aguilar target area, the component seeks to increase the biological diversity, forest cover and carbon storage within the Maria Aguilar Inter Urban Biological Corridor (MAIBC) with 2017 forest cover levels as a baseline, through improved land cover monitoring as part of municipal law enforcement and promotion of best practices within MAIBC. The project will also promote a long-term vision for sustainable urban use and the sustainable economic use of biological resources. Using SINAMODICUT as a tool to enforce compliance of the forestry law within ACLAP and MAIBC will be the basis for incorporating lessons into the guidance document of participant stakeholders as a way to scale up the impact of the project on pilot sites at a national level.

On the one hand, the project will contribute towards maintaining ecosystem and biodiversity goods and services through the improvement of terrestrial landscapes such as the remaining green areas, forest patches (secondary and fragmented secondary forests) and vegetation, which will enable greater connectivity and conserve biodiversity. This will in turn, increase carbon sequestration rates. Also, it is expected that 50 Km^2 of land tenancy records within MAIBC are published through SNIT to enable municipal governments to link gain or loss of forest cover to land tenancy records on an annual basis, thus enhancing their planning. These images reflecting annual forest change will assist municipalities and other institutions in preventing illegal occupation or restricted land use changes. They will also facilitate measuring regeneration trends in forest cover on private land, opening up the possibility of the eventual development of economic incentives for regeneration as an environmental service. For this to happen, a series of baseline studies will be carried out, including a 2015 baseline study of forest coverage of MAIBC; gain and loss of forest cover within MAIBC for years 2017, 2018, 2019; and a 2015 baseline study of urban land cover. The experiences and lessons learned from monitoring land use change within MAIBC will be systematized into guidance documents and toolkits to inform future urban policy.

This project will enhance the ecological integrity and connectivity of green areas (fragmented secondary forests) through landscape management tools such as enrichment of existing forests with native species in the river margins and spring protection areas. Reforestation campaigns will be organized in conjunction with the National Power and Light Company, using existing native species nurseries and 20 new ones set up by the Project and the company's own experience to reforest the river banks and spring protection areas. As a result, It is expected that at least 20,000 new trees will be planted resulting in an increase in the amount of flora and fauna, particularly of birds that use the area as a place of passage and an increased productivity and density of the resident herpetofauna.

This project will allow the RMAIBC to serve as a mechanism for inter-institutional coordination enabling zoning and actions related to connectivity, conservation and forest rehabilitation, as well as improving water quality.

4) Incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and co-financing:

The project will add value to existing baseline investments though an innovative approach of generating and using official environmental information to trigger multi-stakeholder action to combat biodiversity loss. The comparison of baseline and alternative scenarios and global environmental benefits of the project are summarized below:

Current practices	Alternatives to be put in place by the project	Global Environmental Benefits
SINAC relies on reports by citizens of deforestation before it processes Forestry Law violations through administrative or judicial tribunals.	National System for Monitoring Land Use Change Dynamics publishes yearly maps tied to public land tenancy information showing total gain and loss of forest cover within production landscapes at a national level.	Reduction in area converted annually from forest to other land cover, from 21,707ha/yr to 354ha/yr, resulting in a net avoided deforestation over the project area of 11,033ha. Increased connectivity between production landscapes and protected areas contribute to the conservation of biological diversity. Over 2,700 hectares of landscape management tools comprising the following: 700 ha of micro corridors; 2,000 ha of Silvo-pastoral systems to increase connectivity between production landscapes and ACLAP's protected areas and contribute to the conservation of biodiversity. Increase of forest cover and carbon storage within in the ACLAP buffer zone's farms from 2015 forest cover levels, through adoption of best practices in livestock production and 50,000 trees planted as multi-strata live fences and of protection zones covering 100km leading to: a) Percentage increase in biomass stocks of XtCO2eq; b) Reduction from 10% of CO_2e emissions in 100 beef production farms under NAMA scheme; c) 20% increase in area-weighted Environmental Service Index based on mammals; and d) 1,000 hectares of landscape management tools (micro corridors, life fences, etc) increase connectivity and conserve biodiversity within MAIBC. Increase in area-weighted Environmental Service Index based on birds. Increase in biomass stocks measured in tCO2eq. 50 Km^2 of land tenancy records within MAIBC are published through SNIT so municipal governments may link gain or loss of forest cover to land tenancy records on an annual basis.
FONAFIFO does not monitor forest cover within beneficiaries of PES schemes or other incentive mechanisms on a yearly basis tied to tenancy records. Additional yearly interpretation of gain and loss of forest cover will.	Total gain and loss of forest cover within production landscapes at a national level improve accountability of MRV systems of FONAFIFO and its responsibilities under UNFCCC.	
Ministries of Agriculture, Environment, and Finance rely on agricultural census or voluntary information by private sector to estimate total land cover of main export commodities. There is no periodic monitoring by local or central government of the total area destined to commodities.	SINAMODICUT will provide annual estimation of total land cover of pasture, bananas, palm oil determined through advanced classification and spectral signature technology at a national level and through a public dissemination portal (SNIT).	
Certification schemes imply a significant investment for producers upfront with the promise of eventual price differentiation.	A low cost certification scheme for "Deforestation free production units" can easily differentiate products coming for farmers not associated with illegal land use change.	
Municipalities do not coordinate on an ecosystemic or watershed level so actions to conserve biological corridors are hard to implement.	Inter-municipal coordination mechanism to reforest riverbeds of the Maria Aguilar river.	
National Environmental information is developed with weak institutional backing, under resourced departments in terms finance and technical expertise.	Articulation inter-institutional coordination of different institutions pertaining SINIA.	
Stakeholders compete for services in ways which degrade ecosystems	Broaden the scope of the ACLAPs mainstreaming biodiversity into production to include related actors in other public and private sector bodies through integrated planning mechanisms and coordination.	
Not enough farmers invest in new sustainable production techniques such as silvo pastoral systems.	Farmers are paid a price premium or improved contract conditions from buyers interested in deforestation free products.	

5) Global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF); and 6) innovation, sustainability and potential for scaling up.

The project strategy will contribute to the global environmental benefits presented in the table above, including biodiversity of global importance from three Key Biodiversity Areas found in the two target areas (ACLAP and MAIBC). ACLAP is one of the 11 Conservation Areas of Costa Rica, conserving important biodiversity including a UNESCO World Heritage site (La Amistad International Park) and two Key Biodiversity Areas (Birdlife identified IPA-CR011 Los Santos La Amistad Pacífico and IPA-CR009 Cordillera de Talamanca). Due to its geographical position, ACLAP is a natural bridge and filter between North and South America presenting six zones of transition. Its ecosystems range from tropical forests, to rainforests and cloud forests, moorland and peatlands. As such the flora and

fauna is widely varied including the Baird´s tapir, giant anteaters, all six species of neotropical cats – jaguar, puma, ocelot, margay, oncilla and jaguarondi as well as, monkeys, coatis, over 600 bird species, 115 species of fish, and almost 300 reptile and amphibian species, many of which are in danger of extinction.

MAIBC contains part of one the only Key Biodiversity Area within an urban area in Costa Rica. Birdlife designated El Rodeo, Cerros de Escazu y La Carpintera as an Important Bird Area IPA-CR008, because important migratory birds cross over the area or make use of stopover sites for resting, feeding or overwintering. The area classified as a zone of moderate endemism except for San Ramón de La Unión, one of the four areas of high endemism in Costa Rica. The most important endemism of this area consists of vertebrates, with 28 endemic herpetological species and various salamanders of the family Plethodontidae. This area is also considered to be the zone with the highest diversity of birds in the country, as accounted for by sightings. Particularly important are the miniature orchids of the Pleurothallidinae family. As for trees, of the 15 species of oak (family Fagacea), only the Quercus tonduzii is considered endemic and is unique to this area.

Innovation:
The use of mapping vegetation loss and gain tied to land tenancy in private productive land, on a publically accessible and annual basis (see Component 1), is highly innovative. Other examples around the world, such as Brazil's Amazon monitoring system and the Global Forest Watch, track forest loss and gain but do not tie data to tenancy. Furthermore, the project will test these technologies in both rural and urban contexts, with lessons learned to be disseminated and applied at a national (and even international) level. The project will also introduce innovative sustainable agricultural practices (taking successful cases from other sites and countries such as Colombia and taking advantage of UNDPs network of experts), that have been proven to be effective as income-generating, environmentally-friendly management tools with positive effects on biodiversity.

Sustainability:
The project will ensure the sustainability of project activities by promoting an inter-institutional agreement and a Ministerial Decree formalizing the establishment, management arrangements and financial sustainability of the National System for Monitoring Land Use Change Dynamics (SINAMODICUT) including annual monitoring of gain and loss of forest cover within agricultural production landscapes, and urban biological corridors of Costa Rica (see Component 1). This effort will be supported by a multiple stakeholder approach involving both public and private actors that will continue beyond the lifetime of this project. It will allow MINAE, municipalities and the judicial system to improve both the prevention and control of forest loss, speeding up the monitoring and processing of infringements. It will also reward farmers who have a proven record in deforestation-free production, generating additional income for these, through innovative certification schemes and PES, at no cost to farmers.

Potential for scaling up:
Having piloted how a strong a SINIA can improve enforcement of environmental legislation at the same time as it helps increase income of producers who adopt best practices, the project strategy and activities will be rolled out and replicated by different public sector entities. SINAC will be able to structurally modify how it processes Forestry Law violations within production landscapes, and is expected to instruct other Conservation Areas to adopt the successful lessons. FONAFIFO will also be able to design new PES packages because SINAMODICUT will provide most of the necessary information required to prize land tenants who increase forest cover and ecosystemic services within their farms, with little additional cost. Municipalities and the Finance ministry will be better equipped to collect taxes and the Ministry of Agriculture will be better able to monitor commodities production by having official estimates of land cover, which may then be the basis for total output production estimates. All of these conditions will accelerate adoption of lessons learned and consolidate the new dynamic of multi-stakeholder action to combat habitat loss.

The project will support a low-cost technological solution by utilizing widely available LandSat imagery, which would ensure scaling up to other countries. Ministerial representations from Madagascar, Morocco and Paraguay have all visited Costa Rica in the last year, to discuss the initial idea of the system. All of these governmental missions have shown an interest to participate actively.

Specifically, the project strategy aims to systematize the lessons derived from the use SINAMODICUT as a tool to enforce compliance of the forestry law within ACLAP and MAIBC. This will be the basis for incorporating these lessons into the guidance documents, capacity building programmes and policies of the environmental tribunal judges and prosecutors; SINAC; SINIA; PRIAS and the National Registry.

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

STAKEHOLDER	ROLE AND PARTICIPATION MECHANISM
National Centre for Geo-environmental Information CENIGA	The head of CENIGA has the mandate to act as lead the National System for Environmental Information (SINIA), for this reason it will act as National Director within Project Steering Committee. CENIGA will have direct responsibility for oversight and project implementation and will play a key role both at the sub regional planning level as well as in field-level activities, particularly those directed to development of SINIA and information.
Ministry of environment and Energy (MINAE), Office of the Minister and Vice-Ministers	The Minister will have direct interaction with the National Director of the Project to ensure the strengthening of SINIA if done in accordance to existing Ministerial instructions. The director of CENIGA will convene on behalf of the Minister of Environment so close coordination with the Ministers office is expected to the Minister and Vice-ministers are informed of the process to convene different institutions that need to provide information through SNIT to do so. This will make the response from institutions to be more agile.
Ministry of Agriculture and Livestock (MAG)	MAG is the lead institution of the agricultural sector, it will guide the development of a legal and institutional framework for the incorporation of carbon reduction measures into the agriculture and livestock sector, specially regulating private sector practices. The Vice-Minister with responsibility for the livestock sector will appoint the Director of the NAMA Livestock process to form part of the technical as committee of the project, allowing for articulating work with the Project Coordinator on strategic aspects of project implementation of NAMA related activities. The Ministry will also appoint a focal point within ACLAP region.
CONARE-PRIAS	Will serve as implementing partner and deliver Project services in the form of baseline studies and annual maps for gain and loss of forest cover within productive landscapes and urban biological corridor.
National Geographic Institute (IGN)	Has the mandate to administer the National Territorial Information System SINIA, as such is a direct beneficiary of project implementation. The IGN will form part of the Project Technical Committee.
National Registry	Has the mandate to administer the National Cadaster Information System SIRI, as such is a direct beneficiary of project implementation. The National Registry will name a focal point for the Project Technical Committee.
Committee of Rio Maria Aguilar Inter-Urban Biological Corridor	It will be form part of the technical committee and name an institutional coordinator for component 2 to support reforestations schemes. The representative of this committee will also generate strategic partnerships and platforms for coordination with other institutions. The committee is composed of represtnatives of central government institutions coordinating actions for this corridor.
Municipalities of San José, La Unión Curridabat, Montes de Oca and Alajuelita.	In charge of guiding, implementing, and managing all activities in the territory of San José, will provide technical assistance for projects and will establish a focal point for this project to participate in the technical committee of the project.
FONAFIFO	Will form part of the projects technical committee in two roles. First, as a provider of funds to PES schemes within the ACLAP buffer zone. Second, as focal point to the UNFCCC for the REDD+. FONAFIFO has provided baseline investments for this project in this second capacity, with investments like the baseline study of total cover area of pineapple 2015. FONAFIFO has included the monitoring of gain and loss of forest within productive landscapes into the National REDD strategy. Therefore participation of FONAFIFO in the technical committee will help the project add value to previous investments, and avoid duplication with other resources currently invested particularly regarding foresty within private areas under PES schemes.
SINAC	The National System of Conservation Areas has the mandate to administer protected areas and implement environmental policy within its buffer zones. Compliance with forestry law relies on the ability of SINAC and FONAFIFO to deliver as one in terms of protecting existing forests and offering economic incentives to avoid deforestation across landscapes. For this project the ACLAP will name an institutional focal point for the implementation of

	Component 2. This will entail direct participation in evaluation committees and regular meetings pertaining that component. SINAC-ACLAP will appoint this focal point to the technical committee.
Agricultural production sector	The agro industry sector, including small-, medium-, and large-scale producers, will participate in the implementation of two pilot projects that incorporate economic valuation of ecosystem based adaptation measures. Industry members will also be the beneficiaries of innovative sustainable practices aimed at increasing their eco-competitiveness. In particular the project will liaise with chambers of agricultural and livestock commodities producers, such as the government led Sustainable Pineapple Initiative, CANAPEP (pineapple exporters), CORFOGA (livestock producers).
Civil Society Groups and Indigenous Groups	Within the ACLAP area interventions the beneficiaries will be civil society groups and indigenous representatives especially of the three territories adjacent to PILA National Park – Cabagra, Ujarrás and Salitre); private landowners (especially pineapple, cattle and African palm producers who will be engaged, informed, trained and consulted on issues concerning the prevention and control of vegetation/forest loss); small and medium producers identified for innovative sustainable management practices.
National Direction of Water, Ministry of Environment	Direction of Water has the mandate to manage the National Information System for Integrated Water Management (SINGIRH). This is an information system that collects and shares databases of institutions generating water related information (wells, catchment area protection sites, aqueducts, etc.). In this capacity the Direction will provide co-finance resources and form part of the technical committee.
National Power and Light Company	Coordinating entity in actions for the recovery of green spaces, rearborization and reforestation. In addition, it will be the institution providing technical and logistical support for actions in reducing threats to the ecological integrity, particularly focused on the integral management of remnant vegetation.
AyA	AyA is the national public institution in charge of providing technical and financial assistance to improved water management. It will provide information about rural aqueducts water catchment protection areas to SNIT, as part of its role within SINIGIRH.
IMN	IMN is the national institution in charge of providing meteorological analysis and weather forecasts to the population of Costa Rica. It provides official information regarding carbon emissions, as such it will provide valuable information for project monitoring and evaluation.
INAMU	INAMU is the lead institution that promotes gender equality as a cross cutting issue in national and sub-regional planning, policies and strategies. It will be approached at target Areas sites 1 and 2 to build capacities inside ACLAP and MAICB stakeholders for mainstreaming gender issues in sustainable landscape management measures and decision making.
UNDP-Green Commodities Programme	Will supervise consultants hired to engage companies buying commodities from Costa Rica to use SINAMODICUT as a tool for deforestation free purchasing and participation in the development of incentives for producers.
UNDP	The UNDP will provide technical and administrative support, management tools, and practical and theoretical knowledge to the implementing agencies so that the project is implemented effectively and within the foreseen timeframe.

3. Gender Equality and Women's Empowerment. **Are issues on gender equality and women's empowerment taken into account? (yes x) If yes, briefly describe how it will be mainstreamed into project preparation (e.g. gender analysis), taking into account the differences, needs, roles and priorities of women and men**.

Improvements on gender equality and women's empowerment will be targeted for the interventions in the Maria Aguilar Inter Urban Biological Corridor (MAIBC) and the La Amistad Pacifico Conservation Area (ACLAP). In the urban environment the project will engage women organizations and NGOs and CBOs led by women to provide reforestation and local community actions pertaining the maintenance of ecosystem services and integrity of the Biological Corridor, these entities will be stimulated to appoint female representatives to form part of the governance structure of the MAIBC and within participating municipalities. Within the ACLAP area the project will strengthen the participation of women leaders in the local conservation area committee (COL-ACLAP) and particular attention will be given to generating income and employment opportunities for women and young people in the application of biodiversity mainstreaming measures within agricultural production. The implementation of NAMA within 100 farms will entail a selection process that will favor the empowerment of female headed farms.

At a local level, especially among the indigenous communities of ACLAP and small and medium farming families, Component 2 aimed at introducing innovative farming practices and fire-fighting activities will involve community

leaders as part of the project preparation including both male and female community members. Due to the particular nature of the indigenous territories' leadership mechanisms (Indigenous Development Associations – ADI), women play a central role in decision making processes. The project will naturally adhere to traditional cultural structures. In the case of ACLAP's female community leaders also form part of the Agenda's fire fighting programme and pilot projects. With the preparation of this project, these close working relationships will be reinforced so that the female perspective is accordingly integrated into the project design.

4 Risks. **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).**

Risk	Level *	Risk Mitigation Measures
A new political administration (to start until May 2018) may not be supportive of a system that monitors gain and loss of forest within private land.	L	The political transition is still two years away, sufficient time for the project to invest in wide scale multi-sectoral and inter-institutional dialogue to ensure and share the benefits of the system for biodiversity, and for generating economic incentives for producers. This will aim to reduce potential opposition for a system that simply makes more effective government enforcement of existing regulations. Costa Rica has a small population and it is relatively easy to identify opinion makers from particular political spectrums. UNDP, the project unit and MINAE will make sure all potential political sectors and leaders understand the benefits of the SINAMODICUT for all governmental administrations.
The financial sustainability of new components of SINAMODICUT is not guaranteed at the end of the project.	M	The project incorporates a Financial Sustainability Strategy as an output. Thus, it will invest in convening all potential domestic funding options to ensure the long term financing of the components to be developed by CONARE PRIAS. The risk is low because, once operational, the system will generate savings to many institutions that require this kind of information for tax purposes, land planning, among other roles.
Opposition from GIS and TI departments of institutions to follow the SINIA mandate or to publish GIS maps through SNIT	L	The project will actively involve GIS and IT departments of relevant institutions to ensure that the advantages of linking land tenancy records to Environmental GIS information generated by these entities, are understood by all parties. The emphasis will be to explain that SINAMODICUT and SINIA do not replace the GIS work of different institutions with clearly defined mandates, but that it makes their work more effective for enforcing legislation.
Opposition from vocal producers to have a deforestation free certification scheme.	M	The certification scheme has been conceived and suggested in different fora by the Green Commodities National Pineapple Platform, the UNREDD programmes, Essential Costa Rica programme by the Foreign Trade Promotion Office which aims to differentiate products internationally. The seal requires significant dialogue with sectors. The PPG will allocate resources to facilitate a participatory process to discuss viability of a certification scheme within this project.

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

The GEF Project *Conservation, sustainable use of biodiversity, and maintenance of ecosystem services of internationally important protected wetlands* will generate wetlands inventories and official maps for ACLAP region and other regions of the country. Once these maps are published though SNIT by the end of 2016 they will provide an important input for SINAMODICUT consolidation. By having official maps of wetlands published through SNIT, the photo interpreters at CONARE-PRIAS may use officialized information of wetlands and this will make CONARE's forest cover maps more reliable, as they are based on officially determined wetlands, and not on their own un-confirmed interpretation of wetlands. During court or tribunal processing this may make the difference between accepting SINAMODICUT reports as evidence in court. Within ACLAP alone the wetlands project will invest at least $150,000 of GEF resources to develop wetland maps published through SNIT.

A significant portion of UNDP's GEF Portfolio for addressing chemicals and waste management, is anchored nationally at DIGECA the Environmental Management Directorate of the Ministry of Environment, responsible for compliance with international conventions and protocols such as Montreal, Stockholm, and Minamata. The project will interact with DIGECA's so that it cooperates fully with SINIA. Close coordination will be maintained throughout

project implementation so that other existing GEF initiatives that have significant investments on environmental information are used and shared by the stakeholders involved in SINIA.

The proposed project will complement over 20 years of support by GEF funded Small Grants Program (SGP) to Biological corridors in Costa Rica. The SGP has provided technical assistance to community organizations and leaders and been instrumental in the development of the National Programme of Biological Corridors and the National Programme to Combat Forest Fires. Both of these programmes will help articulate actions with the relevant stakeholders of within ACLAP and the MAIBC. The project will interact closely with GEF 6 SGP project in Costa Rica, regarding the interventions to combat land degradation in the Jesus María and Barranca rivers, particularly as once SINAMODICUT is up and running, it will provide an ideal way to show progress to GEF of achievement of project targets.

*6. **Consistency with National Priorities***. **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, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, etc.**

This project is consistent with the National Biodiversity Policy 2015-2030 for Costa Rica which highlights the need to improve biodiversity by safeguarding ecosystems, species and genetic diversity, increasing the benefits of biodiversity and ecosystem services for the population, integrating biodiversity in productive seascapes and landscapes as well as reducing the urban environmental footprint and improving implementation through participatory planning, knowledge management and capacity building. The National Strategy for Conservation and Sustainable Use of Biodiversity, (to become official by April 2016) has prioritized the following themes (4 out of 8 priorities) which directly relate to the proposed project: A) the need to increase biodiversity resilience through connectivity, restoration of riparian forests, and other threatened ecosystems which provide essential services (in strategic productive landscapes and seascapes as well as urban development), B) integrate biodiversity in landscapes and seascapes and under priority sectors (agriculture, tourism, fisheries, forestry, industry, water management, financial) C) strengthen ecosystem service into spatial planning and accumulated impacts including the reduction of the urban environmental footprint and D) the need to strengthen BD information for decision making and law enforcement including the modernization of land-use monitoring systems.

Furthermore, it is coherent with the 5th National Report to the Convention on Biological Diversity particularly in relation to the integration of biodiversity strategies, plans, and sectoral and cross-sectoral programmes, which includes the full scope of environmental issues (environmental pollution management, biodiversity, water and fire management and PES).The proposed project is aligned with the actions set out in the National Development Plan for Costa Rica 2015-2018 and the strategies and plans related to the implementation of the national Biodiversity Law which highlights the environmental and land management theme particularly in the case of biodiversity management, the importance of an economic efficiency with environmental responsibility. Consolidating the Rio Maria Agilar Inter-Urban Biological Corridor is set as a national priority in the above mentioned Development Plan.

This project is consistent with the National Program to Combat Land Degradation and Costa Rica´s commitments to the UNCCD. The project will generate annual information on forest cover nationally, one of the three degradation indicators suggested by UNCCD to monitor in relation to the degradation neutrality target of the convention.

***7. Knowledge Management.* Outline the knowledge management approach for the project, including, if any, plans for the project to learn from other relevant projects and initiatives, to assess and document in a user-friendly form, and share these experiences and expertise with relevant stakeholders.**

This project will take a highly innovative approach to tracking land use change in productive landscapes by tying the use of forest loss/gain mapping tools to land registry tools, in both rural and urban landscapes and involving multiple public and private stakeholders in the process. It will require a novel technical approach and a great deal of social, legal and political interaction. Consequently, the project will develop proper tools for knowledge management, M&E and learning, whereby the systemization, extraction of lessons-learned and dissemination of good practices becomes a norm throughout the project. The Project will develop a strategy for communication and visibility, websites and blog sharing, knowledge sharing through public workshops and presentations, meetings with community organizations, NGOs and other institutions and round tables to promote research and share experiences and lessons learned. This data management will increase the flow of information and will create links to generate citizen audits and to verify both the

diffusion and the degree of impact obtained. In addition, due to the innovative nature expressed (rural-urban approach/land-use monitoring tied to tenancy/certification schemes, amongst others) it is considered that Costa Rica will pioneer new tools and processes worthy of wider dissemination at a regional and international level.

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

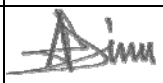
A. RECORD OF ENDORSEMENT[10] OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S):

(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)*
Ruben Muñoz R.	GEF Operational Focal Point, Costa Rica	MINISTRY OF ENVIRONMENT AND ENERGY	FEBRUARY 16, 2016

B. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF policies[11] 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.		March 21, 2016	Santiago Carrizosa, STA, EBD	+507 302-4510	santiago.carrizosa@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.

[i] Represents the protected areas of ACLAP

[ii] This represents the 449,548 hectares of ACLAP's buffer zones + the 197,365 ha of the natural landscapes to be improved in the Rio Maria Aguilar Urban Biological Corridor (lest the urbanised areas) and the wider Rio Grande de Tárcoles river basin

[10] 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.

[11] GEF policies encompass all managed trust funds, namely: GEFTF, LDCF, and SCCF