Meeting of the Board
12 – 14 October 2016
Songdo, Incheon, Republic of Korea
Provisional agenda item 11(f)

GCF/B.14/07/Add.09

27 September 2016

Consideration of funding proposals – Addendum IX

Funding proposal package for FP026

Summary

This addendum contains the following three parts:

a) A funding proposal summary titled "Sustainable landscapes in Eastern Madagascar" submitted by Conservation International and the European Investment Bank.;
b) A no-objection letter issued by the national designated authority or focal point; and
c) Environmental and social report(s) disclosure;

These documents are presented as submitted by the accredited entity and the national designated authority(ies) or focal point(s), respectively. Pursuant to the Comprehensive Information Disclosure Policy of the Fund, the funding proposal titled "Sustainable landscapes in Eastern Madagascar" submitted by Conservation International and the European Investment Bank is being circulated on a limited distribution basis only to Board Members and Alternate Board Members to ensure confidentiality of certain proprietary, legally privileged or commercially sensitive information of the entity.

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GREEN CLIMATE FUND

Funding Proposal

Version 1.1

The Green Climate Fund (GCF) is seeking high-quality funding proposals.

Accredited entities are expected to develop their funding proposals, in close consultation with the relevant national designated authority, with due consideration of the GCF's Investment Framework and Results Management Framework. The funding proposals should demonstrate how the proposed projects or programmes will perform against the investment criteria and achieve part or all of the strategic impact results.

Sustainable Landscapes in Eastern Madagascar

Project/Programme Title:	Improving the resiliency of climate-vulnerable smallholder farmer families, reducing greenhouse gas emissions from deforestation and leveraging private sector climate investments
Country/Region:	Madagascar
Accredited Entity:	Conservation International and the European Investment Bank
Date of Submission:	23 August 2016

GREEN CLIMATE FUND

Contents

Note to accredited entities on the use of the funding proposal template
1. Sections **A, B, D, E** and **H** of the funding proposal require detailed inputs from the accredited entity. For all other sections, including the Appraisal Summary in section F, accredited entities have discretion in how they wish to present the information. Accredited entities can either directly incorporate information into this proposal, or provide summary information in the proposal with cross-reference to other project documents such as project appraisal document. 2. The total number of pages for the funding proposal (excluding annexes) is expected not to exceed 50.

Please submit the completed form to:

fundingproposal@gcfund.org

Please use the following name convention for the file name:
"[FP]-[Agency Short Name]-[Date]-[Serial Number]"

A.1. Brief Project / Programme Information			
A.1.1. Project / programme title		Sustainable Landscapes in Eastern Madagascar	
A.1.2. Project or programme		Project	
A.1.3. Country (ies) / region		Madagascar	
A.1.4. National designated authority (ies)		Ms. Nivohary RAMAROSON (GCF National Focal Point), *Ministère de l'Environnement, de l'Ecologie, et des Forêts*	
A.1.5. Accredited entities		Conservation International Foundation (CI), European Investment Bank (EIB)	
A.1.5.a. Access modality		☐ Direct ☒ International	
A.1.6. Executing entities / beneficiaries		Co-executing entities: Conservation International Madagascar Program (CIM), Bureau National de Coordination des Changements Climatiques (BNCCC), Althelia Climate Fund GP Sarl ("Althelia")	
A.1.7. Project size category (Total investment, million US$)		☐ Micro (≤10) ☒ Medium (50<x≤250)	☐ Small (10<x≤50) ☐ Large (>250)
A.1.8. Mitigation / adaptation focus		☐ Mitigation ☐ Adaptation ☒ Cross-cutting	
A.1.9. Date of submission		August 23, 2016	
A.1.10. Project contact details	Contact persons, positions	Lilian Spijkerman, VP CI-GCF Implementing Agency	James Ranaivoson, Managerial Adviser, Climate Action & Environment Operations
	Organizations	Conservation International	European Investment Bank
	Email addresses	lspijkerman@conservation.org	j.ranaivoson@eib.org
	Telephone numbers	+1 703 341 2772	+352 4379 87315
	Mailing addresses	Conservation International, 2011 Crystal Drive, Suite 500 Arlington VA, 22202,USA	European Investment Bank, 100 Boulevard Konrad Adenauer, L2950 Luxembourg

A.1.11. Results areas *(mark all that apply)*

Reduced emissions from:

- ☒ Energy access and power generation
  (E.g. on-grid, micro-grid or off-grid solar, wind, geothermal, etc.)
- ☐ Low emission transport
  (E.g. high-speed rail, rapid bus system, etc.)
- ☐ Buildings, cities and industries and appliances
  (E.g. new and retrofitted energy-efficient buildings, energy-efficient equipment for companies and supply chain management, etc.)
- ☒ Forestry and land use
  (E.g. forest conservation and management, agroforestry, agricultural irrigation, water treatment and management, etc.)

Increased resilience of:

- ☒ Most vulnerable people and communities
  (E.g. mitigation of operational risk associated with climate change – diversification of supply sources and supply chain management, relocation of manufacturing facilities and warehouses, etc.)
- ☒ Health and well-being, and food and water security
  (E.g. climate-resilient crops, efficient irrigation systems, etc.)
- ☐ Infrastructure and built environment
  (E.g. sea walls, resilient road networks, etc.)
- ☒ Ecosystem and ecosystem services
  (E.g. ecosystem conservation and management, ecotourism, etc.)

A.2. Project / Programme Executive Summary (max 300 words)

Madagascar is one of the most vulnerable countries to climate change in the world[1,2]. Home to vast numbers of extremely vulnerable smallholders[3], the landscapes dominated by natural forest are also sources of greenhouse gas (GHG) emissions from deforestation[4]. The Project goal is to implement sustainable landscape measures to enhance resiliency of smallholders, reduce GHG emissions and channel private finance into climate-smart investments in agriculture and renewable energy that transform livelihoods. The Project aims to demonstrate a replicable model for addressing smallholder vulnerability that mobilizes both the public and private sector. Not-for-profit activities will prepare smallholders to ultimately access private sector investment, providing a pathway out of extreme vulnerability and dependency[5]. The Project goal and innovative model make it attractive for private investors and will leverage funds from the issuance of a first-of-its-kind Green/Climate Bond. All returns and profits from GCF's investments in the private sector activities will be re-invested to capitalise a Climate Change Trust Fund for Madagascar (subject to approval by GCF), to enable continued investment in landscape-level adaptation and mitigation activities.

The public and private sector interventions will make major contributions towards Madagascar's adaptation and mitigation priorities as laid out in national policies and strategies. Among the high-level impacts are 10 $MtCO_2eq$ of reduced emissions; 33 MW capacity of renewable energy generation; 562,000 direct beneficiaries, including 114,000 with improved resilience and 448,000 with access to low-emissions energy; and 1 million indirect beneficiaries.

A.3. Project/Programme Milestone

Expected approval from accredited entity's Board (if applicable)	Within 120 days after GCF Board approval
Expected financial close (if applicable)	dd/mm/yyyy
Estimated implementation start and end date	Start: 01/01/2017 End: 12/31/2026
Project/programme lifespan	10 years for EIB components (private sector); 5 years for CI components (public sector)

[1] Kreft & Eckstein 2014. Global Climate Risk Index 2014. GermanWatch, Briefing Paper
[2] Madagascar was rated as the 5th most vulnerable country in the World to Climate change in Verisk Maplecroft's 2012 report. https://maplecroft.com/about/news/ccvi_2012.html
[3] Harvey et al. 2014. Extreme Vulnerability of smallholder farmers to agricultural risks and climate change in Madagascar. Phil. Trans. R. Soc. B 369:20130089

[4] E.g. Government of Madagascar 2015. Intended Nationally Designated Contributions. UNFCCC
[5] See section C2 for details

B.1. Description of Financial Elements of the Project / Programme

The Sustainable Landscapes in Eastern Madagascar Project ("the Project") led by Conservation International Foundation (CI) and the European Investment Bank (EIB) together, and their co-executing partners the Government of Madagascar through its Climate Change Office (Bureau National de Coordination des Changements Climatiques/BNCCC) and Althelia Climate Fund GP Sarl ("Althelia"), will use three main financial streams that jointly contribute to achieving the Project objectives and leverage public and private finance:

- The public sector grant-financed activities will be implemented by CI (as an Accredited Entity of the GCF), will be executed directly by CI and the *BNCCC,* and will use a combination of grants and contracts with partner organisations and contractors. These activities are not-for-profit adaptation, mitigation, capacity building and mainstreaming interventions to promote climate-smart landscapes by providing specialist expertise to strengthen adaptive capacity of smallholder farmers (the ultimate beneficiaries), raise awareness of climate threats and risk reduction processes and to improve forest management;
- The private sector activities will be implemented by EIB (as an accredited entity of the GCF) and executed through the Investment Fund managed by Althelia, which will target climate-related investments in sustainable agriculture and access to energy (renewable energy, agrienergy, efficient cooking systems, etc.); and,
- The public and private sector parts of the Project will both participate in the creation and capitalisation of a National Climate Change Trust Fund (the "Trust Fund"). This is a national priority identified in the National Policy for Action on Climate Change (*Politique de Lutte contre le Changement Climatique /PNLCC*) and an important part of ensuring financial sustainability and replication of landscape-level adaptation and mitigation measures in the country beyond the end of the Project.

CI, the EIB and their executing partners are requesting for the implementation of this Project a combination of equity participation and grant for a total of US$53.5 million from the Green Climate Fund for:

- A US$15.3 million grant from GCF's Public Sector Window for not-for-profit adaptation, mitigation, capacity building and mainstreaming interventions to promote climate-smart landscapes co-financed with US$0.8M by CI;
- A US$3.2 million grant from the GCF's Public Sector Window for of a new national **Climate Change Trust Fund;**
- A US$35 million equity participation from GCF's Private Sector Window to invest in an **Investment Fund** (the "Investment Fund") with US$15.5 million of co-investment consisting of the following: 1) US$10 million equity participation from the European Investment Bank (EIB) raised through the issuance of an EIB Green/Climate Bond, 2) US$5 million participation, structured as a loan but under the same "juniority" terms as the GCF equity participation, from the EIB through its ACP Smallholders Financing (ACP SFF) Facility fund, and 3) US$0.5 million equity participation from the fund manager Althelia to reach a US$50.5 million target fund size for replicable and scalable for-profit investment in sustainable agriculture and renewable energy activities in Madagascar; and,
- The recycling of the Investment Fund returns (capital and profits attributable to GCF) into the capital of the Climate Change Trust Fund for Madagascar. The Investment Fund returns will initially be repaid to the GCF and then a new proposal will be submitted to GCF requesting these funds to capitalise the Climate Change Trust Fund.

The US$10 million private contribution that will be raised and channelled to the Investment Fund through the issuance of a US$300 million[6] Green/Climate Bond by the European Investment Bank is a major innovation with the potential to unlock private finance currently unavailable for addressing climate adaptation and mitigation. The fact that a portion of the bond issuance is targeted to finance mitigation and adaptation to climate risk in a least developed country viewed as high risk by investors (e.g. Madagascar), while the rest of the issuance is channelled toward more traditional uses (energy efficiency and renewable energy) mainly in Europe is a first-of-its kind, and allows large institutional investors that are usually only looking at large bond issuances in investment-grade countries, to start deploying capital into climate-related investments in least developed countries. The EIB Green/Climate Bond will be offered to large institutional investors, some of which are already buyers of the EIB's Green/Climate Bond programme known as Climate Awareness Bond (CAB) programme. This CAB Bond, issued as "EIB Madagascar Climate Bond", is expected to be the first of a long list of EIB Green/Climate Bonds channelling resources into developing countries, especially the most vulnerable ones. More details about the Bond structure is presented in annex 2b and annex 13.

The public sector interventions are not-for-profit adaptation, mitigation, capacity building and mainstreaming activities to reduce smallholder farmer vulnerability and reduce GHG emissions from deforestation. These activities will not generate cash flow that returns to the Project; however, the financial models for the activities to promote sustainable agriculture demonstrate that the activities will generate sufficient revenues to be self-sustaining for the beneficiary smallholder farmers. See the financial models provided in annex 3a for details. These activities will be implemented over the first five years of the Project.

The private sector interventions are for-profit activities and will be executed by the dedicated Investment Fund with a target size of US$50.5 million channelled through the accredited entity EIB that will receive funding from the GCF, the fund manager Althelia, internal EIB sources and the EIB Bond. The Fund will have a 10-year life span with a four-year investment period into 10 to 15 private sector activities through various financial instruments for investment. Activities could include traditional loans or equity investment, but more likely through profit participation loans (PPL) to deploy financial support to communities, farmer organisations and sustainable companies (see annex 2b for further details). The rationale for PPL is the following: to be in a position to change business-as-usual,

[6] or of an amount in EUR to be determined, in which case the US$10m would be fully FX-hedged upfront

one needs to have access to a different type of financing, and especially longer term-lower interest rates (currently, farmers can access financing that covers 12 to 18 months at rate of 15% to 25% p.a.). PPL offers the Borrower a lower nominal interest rate (4% to 6%), but the Borrower agrees to share a portion of the profit with the Lender, allowing alignment of interest between parties.

On the Foreign Exchange (FX) side, the funding will be deployed either in local currency (MGA) or US$, depending on the use of funds and the nature of revenues (for instance, commodity exports are invoiced in US$, so US$ funding is more appropriate). As resources of the Fund are in US$, the fund will bear the FX risk between MGA/US$ and hedging will be put in place by the Fund Manager.

As shown in annex 3b, under a base-case scenario, the Investment Fund is expected to generate an eight percent annualized Return Rate on Investment (RRI), which corresponds to an estimated US$14 million in profits, net of fees. The targeted RRI is lower than targeted RRI often sought for investments in developing or emerging countries (which usually range between 15 percent and 25 percent) for two main reasons:

1. The Investment Fund prioritises climate change impacts (both adaptation and mitigation), environmental impacts and social impacts over financial profitability and therefore aims at distributing a larger-than-usual portion of the economic value creation to local stakeholders (communities involved in the sustainable agriculture production, NGOs involved in ecosystem-based adaptation and mitigation, etc.), resulting in reducing the portion allocated to investors and thus RRI.
2. Although the targeted activities carried out by the Investment Fund will generate significant measurable long-term emission reductions (see sections E.1 and H for more details about expected impacts), these will not be sold to voluntary or compliance markets to avoid any risk of double counting, thus excluding a potential source of revenues for the Investment Fund that would have topped-up the target profitability.

It is important to note that the investment model has been built on a series of assumptions (explained in annex 2b), and the portfolio level returns are scaled up from three example investments indicative of deals that exist in the pipeline. The actual investments made will have different financial profiles. All investment entails risk and the investments may under- or over-perform relative to expectations. In this proposal mid-case scenarios are presented. Sensitivity analysis can be found in section E.6.3.

Breakdown of cost estimates for total project costs and GCF financing by sub-component in local and foreign currency

Component/Outcome	Sub-component	Amount (for entire project)	Currency	GCF funding amount	Currency of disbursement to recipient
A7.0 Strengthened adaptive capacity and reduced exposure to climate risks	Public Sector activities in support of a Sustainable Agriculture program	6.5	million USD ($)	98%	USD ($)
	Private Sector (Investment Fund) sustainable agriculture investments	26.5	million USD ($)	69%	USD ($)
A8.0. Strengthened awareness of climate threats and risk-reduction processes	Public Sector activities to improve climate risk awareness and adaptation measures	0.6	million USD ($)	100%	USD ($)
A5.0 Strengthened institutional and regulatory systems for climate-responsive planning and development	Public Sector activities on institutional capacity building, including capacity for sustainable financing of future climate change mitigation and adaptation actions	1.0	million USD ($)	100%	USD ($)
	Initial Capitalization of a Climate Change Trust Fund	3.2	million USD ($)	100%	USD ($)
M6.0 Increased number of low-emission power suppliers	Private Sector (Investment Fund) investments in low-emission energy generation and distribution (see section C.3 for more details about targeted investments)	24.0	million USD ($)	69%	USD ($)
M9.0 Improved management of forest areas contributing to emissions reductions	Public Sector activities to reduce deforestation by improving forest management	4.7	million USD ($)	86%	USD ($)
Project Management	Overall coordination and monitoring of the public sector activities	3.3	million USD ($)	100%	USD ($)
Total project financing		69.8	million USD ($)	77%	USD ($)

For more details on the budget per output - see annex 15

B.2. Project Financing Information

	Financial Instrument	Amount	Currency	Tenor	Pricing
(a) Total project financing	**(a) = (b) + (c)**	69.8	million USD ($)		
(b) GCF financing to recipient	(i) Senior Loans	.....	Options	.....	( ) %
	(ii) Subordinated Loans	.....	Options	.....	( ) %
	(iii) Equity	35.0	million USD ($)	10 years	( ) % IRR
	(iv) Guarantees	.....	Options	.....	
	(v) Reimbursable grants *	.....	Options	.....	
	(vi) Grants *	18.5	million USD ($)	5 years	
	** Please provide economic and financial justification in section F.1 for the concessionality that GCF is expected to provide, particularly in the case of grants. Please specify difference in tenor and price between GCF financing and that of accredited entities. Please note that the level of concessionality should correspond to the level of the project/programme's expected performance against the investment criteria indicated in section E.*				
	Total requested (i+ii+iii+iv+v+vi)	.....		Options	

	Financial Instrument	Amount	Currency	Name of Institution	Tenor	Pricing	Seniority
(c) Co-financing to recipient	Senior Loans	10	million USD ($)	EIB (Green Bond)	10 years		senior
	Subordinated Loans	5.0	million USD ($)	EIB (ACP SFF)	10 years		junior
	Equity	0.5	million USD ($)	Althelia	10 years		senior
	Grant	0.8	million USD ($)	CI	5 years		

Lead financing institution: European Investment Bank (EIB)

Co-investments in the Investment Fund :

- US$10M from the EIB through the issuance of a Green/Climate Bond to institutional investors (see further detail of the Bond in annex 2b and annex 13).
- US$5M from the EIB through their ACP SFF programme
- US$0.5M from the fund manager, Althelia

Co-financing for the public sector activities:

- US$0.8M from Conservation International

(d) Financial terms between GCF and AE (if applicable)

Not applicable

Financial instrument	Amount	Currency	Tenor	Pricing
Choose an item.	.....	Options	( ) years	( ) %

B.3. Financial Markets Overview (if applicable)

Access to credit is expensive and limited in Madagascar and there is no financing available at scale for climate-related activities such as for sustainable agriculture/land use, conservation and access to energy activities that are proposed in the Project. Currently, there are two main sources of financing for the private sector in Madagascar:

1. Banks: Madagascar's financial sector is concentrated (commercial banks hold 84% of total system assets), but only offer basic savings and credit products to a select clientele[7]. Credit tends to be of short- to medium-term in nature, with a maximum maturity of seven years, making it difficult to fund projects that will have a significant impact in changing land-use patterns.

   Access to financial services is limited: By 2011 only 45 out of every 1000 adults were a depositor at a commercial bank, and only 16 out of every 1000 was a borrower. In 2016, the World Bank's Doing Business ranked Madagascar the 167th country and 180th in 2015 out of 189 countries, in terms of access to credit[8].

   Commercial banks are mainly serving private small- and medium-sized enterprises (SMEs), excluding farmers and community organisations, and usually bear a high interest rate that prevents long-term investment into transformational changes of the economy.

2. Private equity: There are eight active private equity investors in Madagascar: five of which are solely focused on the island while three others have a broader geographical mandate. These private equity institutions are grouped within the Malagasy Private Equity Association (*AMIC, Association Malagasy des Investisseurs en Capital*) and represent US$400 million of invested capital in Madagascar[9]. They mostly invest in venture capital and growth capital, in fast growing sectors such as telecom, internet and communications, agri-business[10] and retail or tourism. They do not address the sector targeted by the Investment Fund (community-based sustainable agriculture production and access to energy) because of lack of knowledge as well as perceived risks and inadequate financial instruments to deploy (see section B1 for more details about the relevance of the proposed financial instrument). Following meetings with members of the AMIC, however,there could be potential cooperation or co-investment between the Investment Fund and existing traditional private equity investors. For instance when the Investment Fund finances the upstream of the supply chain (cooperatives of farmers, community organisations, etc.) and the private equity investor fund supports the downstream of the chain (logistic, retail, and export).

In addition to the above, Foreign Direct Investment inflows in Madagascar have strongly declined as an effect of the global crisis and especially due to the major political crisis that the country experienced in 2009-2013, which placed the country into diplomatic isolation. Despite the democratic election of Hery Rajaonarimampianina as President in 2014, investment levels have not yet recovered. In terms of its business climate, Madagascar ranked 163rd out of 189 in the 2015 Doing Business classification published by the World Bank[11] highlighting the fact that significant private investment is unlikely to flow without dedicated mechanisms to reduce these risks.

[7] Making Finance work for Africa, http://www.mfw4a.org/madagascar/financial-sector-profile.html
[8] see http://www.doingbusiness.org/data/exploreeconomies/madagascar
[9] see http://www.amic.mg/
[10] These are large corporate agri-businesses (for instance dairies or fruits export, with companies with US$10m+ turnover) different to the Investment Fund's target
[11] https://en.santandertrade.com/establish-overseas/madagascar/investing-3

Please fill out applicable sub-sections and provide additional information if necessary, as these requirements may vary depending on the nature of the project / programme.

C.1. Strategic Context

This section on strategic context serves as a baseline from which the objectives of the project have been defined.

Madagascar is already one of the most vulnerable countries to climate related risks[12,13] and climate change projections threaten to exacerbate this situation[14], particularly in the landscapes targeted by the project. These landscapes are characterised by i) a climate vulnerable and food insecure population of smallholder farmers; (ii), deforestation leading to increased GHG emissions and degradation of ecosystem services; (iii) deforestation further fuelled by lack of carbon neutral and land neutral energy sources (e.g. renewables); and (iv) a lack of capital to invest in aforementioned sectors.

Climate and Projected Climate Change

Madagascar's climate is highly varied, with the southwest being semi-arid while the east coast is humid. Average temperature varies from 23-27°C on the coast and 16-19°C in the highlands. The rainfall in the Ankeniheny-Zahamena Forest Corridor (known by its French abbreviation, CAZ) and Ambositra-Vondrozo Forest Corridor (COFAV) landscapes targeted by the Project averages 1,500-2,500mm per year with little variation all year round. Rainfall in these landscapes is driven by the easterly trade winds meeting the uplands. Both landscapes are affected by cyclones resulting in heavy rain, strong winds and frequent flooding. The cyclone "season" is November to May.

Observational evidence shows that the minimum temperature in Madagascar has been consistently increasing over the last 75 years. In the south, temperatures have been steadily increasing since the 1950s (0.2°C warmer in 2000[15]) and drought has become more frequent; in the north temperatures have also started rising but to a lesser extent. There has been a lower volume of rainfall nationally. Future temperature changes in Madagascar have been projected using a regional climate model based on 13 global climate models (GCM) that project to the period 2046-2065[16]. The model predicts warming across the island (with regional differences) and areas of both increasing and decreasing precipitation. Southern Madagascar is projected to have the greatest warming (2.6°C by 2055), while less warming is predicted in the coastal areas and the north (1.1 °C). The CAZ and COFAV landscapes are predicted to have warming of approximately 1.5°C. Changes in precipitation were predicted based on six downscaled GCMs and the projected median rainfall will increase throughout the summer months (November to April). During the winter (May to October) the tropical regions are predicted to be wetter, and have more frequent storms, while the southern half of the east coast is projected to be drier by 2050. Rainfall intensity is predicted to increase during the rainy season but decrease in the dry season. Models predicted that the likelihood of cyclones forming will decrease during the early part of the main season, but that their intensity, associated winds and destructive power are suspected to increase.

A climate vulnerable and food insecure population of smallholder farmers

Across the tropics, smallholder farmers already face many challenges. Climate change is expected to disproportionately affect smallholder farmers and make their livelihoods even more precarious. Malagasy smallholders, especially female smallholders, are particularly vulnerable to any shocks owing to their high dependence on agriculture for their livelihoods, chronic food insecurity, physical isolation and the lack of access to formal safety nets. Conservation International's research[17] on food security among smallholder households in forest dominated landscapes in Madagascar revealed that 75 percent of households reported that for at least one month of the year they don't produce enough to feed their households, 40 percent reported that they have insufficient food during the "lean" season that is typically four months long and five percent never have sufficient food for all household members to have three meals a day. Smallholders are frequently exposed to extreme weather events (particularly cyclones and flooding), which cause significant crop and income losses and exacerbate food insecurity. Climate change projections for Madagascar predict more intense cyclones and flooding in the future[18]. Although farmers use a variety of risk-coping strategies, these are insufficient to prevent them from experiencing food insecurity. Common coping strategies are extreme and those reported by smallholders include eating smaller meals, eating fewer times a day, changing their diet and supplementing their food supplies by harvesting wild tubers in nearby forests. Farmers also sell household assets or send household members to get outside employment to buy food during difficult periods. Few farmers have adjusted their farming strategies in response to climate change, owing to limited resources and capacity.

[12] Kreft & Eckstein 2014. Global Climate Risk Index 2014. GermanWatch, Briefing Paper
[13] Madagascar was rated as the 5th most vulnerable country in the World to Climate change in Verisk Maplecroft's 2012 report. https://maplecroft.com/about/news/ccvi_2012.html
[14] Tadross et al. 2008. Climate change in Madagascar; recent past and future. World Bank report
[15] Tadross et al. 2008. Climate change in Madagascar; recent past and future. World Bank report
[16] Ibid.
[17] Harvey et al., 2014. Extreme vulnerability of smallholder farmers to agricultural risks and climate change in Madagascar. *Phil. Trans. R. Soc. B* 20130089. http://rstb.royalsocietypublishing.org/content/369/1639/20130089

[18] Tadross et al. 2008. Climate change in Madagascar; recent past and future. World Bank report

Deforestation leading to increased GHG emissions and degradation of ecosystem services

Madagascar has suffered significant deforestation and forest fragmentation over the last 50 years in large part due to unsustainable slash-and-burn agriculture (locally known as *tavy*) used by smallholder farmers. National forest cover decreased by almost 40 percent from the 1950s to 2000, much of the remaining forest land is highly degraded[19] and about 10% of the country retains natural forest cover. Annual deforestation of natural forests continues at a fast pace with an average of 36,000 hectares lost per year (representing on average 0.4% of total natural forest cover) between 2005 and 2010[20]. The Government of Madagascar recognises deforestation and forest degradation as a major source of the national GHG emissions but relatively little progress has been made towards implementing a REDD+ strategy. In addition, much of the agricultural land is severely degraded due to unsustainable land-use practices[21], particularly the continued use of *tavy*. As a result, Madagascar has severe problems with soil erosion that further aggravates the precarious food production system and this further drives people to deforest in the search for new land. See annex 2a for further discussion on the drivers of deforestation.

Limited access to energy and lack of renewable energy

Renewable sources of energy are also essential for sustainable economic development for both the rural and urban populations of Madagascar. Currently approximately 15% of Madagascar's population has access to electricity and this is almost exclusively in urban areas[22]. In addition, in recent years there has been little investment in the sector and the state run electricity company, JIRAMA, has struggled to maintain supplies using its old infrastructure. Nevertheless, reforms to the sector have been introduced and the National Agency for Rural Electrification (ADER) has been established. Madagascar has important renewable energy potential, particularly from hydro, biomass, solar and wind, and ADER has identified a portfolio of potential projects that can be developed with adequate financing.

Private Sector Investment

As noted in section B3, there are very few opportunities to access financing for climate related conservation activities and for sustainable agriculture businesses. Viable, profitable businesses that generate wealth and employment are key to the long-term success of sustainable agricultural production in rural Madagascar and building resilient households and communities. Appropriate and targeted investment in agriculture can transform livelihoods and reverse long-term trends of environmental degradation.

The baseline for the activities of the Investment Fund is that development of the sustainable agriculture and renewable energy sectors are constrained by a lack of private capital willing to take the risks involved in Malagasy investments for the returns that are available. The barriers to investment in Madagascar are numerous including recent political instability, poor infrastructure, high poverty and low education levels among the population and high climate related risks (see section G and annex 2b for further description of risks related to investment). With regard to renewable energy amongst rural populations, profitable and investable business models can be a challenge to find because of the low spending power of rural consumers and their historic use of low-cost (if sometimes unsustainable) energy sources such as wood and charcoal. In the agriculture space, the diversity of crops produced means that most investments tend to be niche and not easily scalable and profitable business models largely non-existent. Therefore a new type of investment model is needed. One that can invest the extra resources into developing and sourcing sustainable investment opportunities and one that can take the high levels of risk associated without necessarily being able to provide high rates of return. A pioneering Investment Fund of this nature, as is proposed in the Project, will pave the way for a greater scale of investment in years to come as business models are proven, sustainable enterprises begin to scale and other country-wide factors such as political stability and infrastructure improve.

Viable, profitable businesses that generate wealth and employment are key to the long-term success of sustainable agricultural production in rural Madagascar and building resilient households and communities. Appropriate and targeted investment in agriculture can transform livelihoods and reverse long-term trends of environmental degradation.

Finally, as described in section B4, Madagascar lacks available capital for private investment to support climate-related activities, especially community-based sustainable land use production. The financial instrument offered to communities and farmers' organisations has the potential to lead to a transformational change of land use as well as to drive further replication throughout the country and other countries with similar challenges.

National Policies and Strategies

The aforementioned themes of climate risk, food insecurity, poverty leading to a highly vulnerable population, emissions from deforestation and lack of investment opportunities are recognized in numerous national policies and strategies (as well as international priorities such as the UN's Sustainable Development Goals). The importance of environmental issues is recognized in the Malagasy constitution and the country has ratified most of the major international environmental conventions including the Climate Change Convention (ratified in 1998) and some of its key agreements such as the Kyoto Protocol (ratified in 2003), the Doha Amendment to the Kyoto Protocol (ratified in 2014) and the Paris Agreement (signed in April 2016). Madagascar has developed a variety of official documents related to climate change, many of which are specifically related to the UNFCCC (including quantified Intended Nationally Determined Contributions in 2015).

[19] Harper et al. 2007. Fifty years of deforestation and forest fragmentation in Madagascar. Environnemental Conservation 34: 325-333
[20] Office National pour l'Environnement et al. 2013. Evolution de la Couverture de forêts naturelles à Madagascar.
[21] Styger et al. 2009. Degrading uplands in the rainforest region of Madagascar: fallow biomass, nutrient stocks, and soil nutrient availability. *Agroforestry Systems* 77:107-122
[22] World Bank 2010. Madagascar: Vers un agenda de relance économique. World Bank report

Some Ministries and/or sectors have developed their own documents that are intended to inform future planning. Two of the earliest sectors to develop climate strategy documents were the Ministries responsible for Agriculture, Livestock and Fisheries and the Ministry responsible for Public Health. The Project will make major contributions to advancing national objectives as set out in various national policy and sector strategy documents and presented in more detail in section E5 and annex 2a.

Policy areas of particular relevance to this Project relate to agriculture, energy and forest conservation and the project is perfectly aligned with the country's existing policies in these areas and will contribute to furthering national objectives in these areas.

Sustainable Agriculture

Although 86% of rural livelihoods and 54% of urban jobs are in the agriculture, livestock or fisheries sector, its contribution to national productivity remains relatively low. For over 30 years the contribution to GDP has been stagnant at about 25% and growth in the sector has averaged about 1.5% per year[23]. Although modest advances were made in the 2002-2009 period, the sector has contracted since the 2009 political crisis. The country's agricultural production has been neither sufficient to assure food security for the growing population nor able to provide sufficient revenues to give a way out from the grinding poverty that characterizes rural Madagascar. Improving these conditions will be a challenge in the face of the impacts of climate change that will include increased cyclones, flooding droughts, soil erosion and pests[24].

Madagascar has struggled to attract direct foreign investment into its agricultural sector due to difficulties posed by high levels of rural poverty, lack of infrastructure, unclear land tenure, unstable government and a high exposure to climate related disasters. The sector has potential, however, as there are large land areas available of which only a small fraction has been cultivated. Madagascar's range of crops (e.g. cloves, vanilla, essential oils, cocoa beans, sugar, beans, pepper, coffee, etc.) produced for export is also diverse, presenting the opportunity for growth in a number of diversified sectors. These conditions present an opportunity for targeted investments in the climate-smart sustainable agriculture sector that can provide jobs and boost much needed exports. Such investments also contribute to the Sector Policy for Agriculture, Livestock and Fisheries (PSAEP), which calls for modernization of systems as well as contributing to the emerging REDD+ strategy.

Energy

Improved energy access is a priority in Madagascar with the country ranked globally 188 out of 189 countries for access to electricity[25]. Madagascar's Intended Nationally Determined Contributions (INDC) aims to address this primarily through increased use of renewable technology, improved efficiency and improved stoves (see Section E5 below for details).

Throughout the country, heating and cooking is predominantly fuelled by wood and charcoal (80% of the population cook with charcoal or fire wood and 92% of the energy used in Madagascar every day is for cooking purposes[26]). The harvest and use of wood for cooking predominately falls to women who are burdened with time spent on collection and suffer high rates of respiratory complications due to the open fires. Kerosene and candles are the most important sources for lighting. The Malagasy Government, supported by the World Bank, is launching a new program that aims to roll-out the use of ethanol stoves at a large scale by attracting investment in the supply chain (sugar plantation, distilleries, as well as stove manufacturing and distribution).

Only five percent of the rural population has access to electricity. Those that do mainly get their energy from diesel power plants in isolated small- or mini-grids. The power plants usually only work for a few hours in the evening and prices per kWh are high (about US$.63/kWh). Since 2007, there has been a shift to include renewable energy projects with about nine small hydropower-plants, five wind power plants and one biomass plant running village electrification schemes – plus a few older plants and others implemented by NGOs. To date solar power has only been used for electrification of some social infrastructure and for single households, mainly in the form of pico-solar-systems.

The key barriers to access modern energy services in rural areas include:

- Lack of a national distribution grid, and no plans to extend existing grids in urban or more densely populated areas within the coming decade;
- The Rural Electrification Agency (*Agence d'Electrification Rurale/ADER*) has a fraction of the budget enjoyed by the national power utility company (approximately 1/20th) and this has been restricted further since the 2009 political crisis, to approximately US$4.5 million in 2010. The private sector struggles to raise capital to co-finance rural electrification projects; and,
- Very low purchasing power of rural customers, which can conflict with the relatively high costs of renewable energy's per kWh, due to costly imported equipment, etc.

[23] MAEP (2015) Programme sectoriel Agriculture, Elevage Pêche Plan National d'Investissement Agricole 2016-2020
[24] http://pdf.usaid.gov/pdf_docs/PNADW661.pdf
[25] see http://www.doingbusiness.org/data/exploreeconomies/madagascar
[26] WWF (2013) *Cyclone victims in Madagascar get help with Earth Hour wood stoves* - http://wwf.panda.org/wwf_news/?208020/Cyclone-victims-in-Madagascar-get-help-with-Earth-Hour-wood-stoves#sthash.K2JEHoFF.dpuf

The key actors in the access to energy sector (including renewables) include:

Public institutions: Activities concerning rural electrification are the responsibility of the Rural Electrification Agency (ADER), which was established in 2004 under the aegis of the Ministry of Energy. ADER is responsible for ensuring the implementation of the rural electrification policies and the administration of related instruments, for promoting the provision of private-sector-services and providing technical advice to private operators, and for supervising the realization and financing of rural electrification projects.

Private sector: Private sector participation in rural electrification has been promoted since 2004 (end of the energy reform process)[27]. To date some 20 operators – mainly SMEs – have realized approximately 80 projects in rural areas. Most are associated members in the *Association des Opérateurs Professionnels en Electrification de Madagascar (AOPEM).* This private sector is relatively dynamic but faces some problems regarding experience with renewable electrification schemes and access to project finance, due to their small sizes, and weaknesses in book-keeping and business plan development.

Forest Conservation and REDD+

Since the early 1990s Madagascar has pursued a National Environment Program that put a large emphasis on the protection of the country's unique terrestrial biodiversity, most of which is restricted to forests. The creation and improved management of a network of national parks and reserves were an important part of this environment program, but this network covers less than 15% of the country's forests. More recently, environmental policy focus has shifted towards maintaining ecosystem services including those related to climate change (i.e. ecosystem-based adaptation and carbon sequestration/storage) and improving local governance of forest resources through various approaches (e.g. community forestry and community co-managed protected areas that secure resource rights for local people). In this context, the Government of Madagascar has been engaged in the REDD+ process since 2006 and has slowly been developing its institutional capacity for implementing REDD+ in a somewhat stop-start manner due to a period of political turbulence.

Progress on REDD+ has recently accelerated with the approval of Forest Carbon Partnership Facility funding in 2014 and a grant from the World Bank in 2015 to implement their Readiness Preparation Proposal (R-PP). Most recently in September 2015, Madagascar submitted an Emissions Reduction Program Idea Note to the Forest Carbon Partnership Facility (FCPF) Carbon Fund, which outlines a program in the northeast of the country that will address deforestation in 14 watersheds. In support of the national REDD+ process, several REDD+ pilots have been developed and implemented in Madagascar with the participation of civil society, including CAZ and COFAV. Project developers include the Government of Madagascar, international NGOs and national institutions. The combination of a developing REDD+ strategy at the national level with the implementation of landscape-level interventions means there is great demand for investment in activities that address the drivers of deforestation such as those proposed as part of the Project.

This Project proposed to GCF is completely aligned with the national REDD+ process and it will take guidance (for example in methodologies for calculating emissions reductions) from any national REDD+ developments, including any REDD+ jurisdictions that are defined (there are currently none). The Project's actions are additional because while strategies and programs are being drafted, there is very little finance available to implement the scale of action required.

The technical specifics of how REDD+ accounting and compensation will be undertaken are not available at this time and are open to further consultation and development. As such it is not possible to define exactly how the project will interact with the national REDD+ program; however, the following principles will be followed:

- The project, through CI's continued participation in the national REDD+ advisory committee, will remain an active contributor to the development of the country's REDD+ strategy and will ensure that the project remains fully aligned with national REDD+ developments;
- Given that the Green Climate Fund will publish statistics on emissions reductions achieved by this project, and to avoid potential double counting, the Investment Fund will not invest directly in REDD+ projects or programs for the purpose of achieving tradeable emission reductions;
- Where it invests in enterprises that contribute to emissions reductions that fall under a GHG accounting program (such as the FCPF's Carbon Fund), the Fund will co-ordinate with the REDD+ program to get their contribution recognized and attributed to the GCF in the national REDD registry (that will be created as part of the FCPF supported national REDD+ program);
- Where it invests in activities that address deforestation as part of a REDD+ project, a requirement of investment will be that the project's accounting is aligned with any higher-level national or jurisdictional programs that overlap; and,
- To avoid double counting, any tradable emissions reductions generated during the project period through the improved management of forests at CAZ and COFAV will be retired in the project and national registries (and so not available for sale).

[27] https://www-cif.climateinvestmentfunds.org/sites/default/files/meeting-documents/madagascar_eoi_0.pdf

C.2. Project / Programme Objective against Baseline

The Green Climate Fund is built on the premise to provide finance that is catalytic and mobilizes much greater sums of private finance to those countries that are most vulnerable to climate change. Especially in least developed countries with its difficult investment environments that require broad macro-economic reform to address the issues, GCF funding can play a paradigm shifting role when targeting small- and medium-sized enterprise initiatives in mitigation and adaptation. This project directly responds to this opportunity by testing a potential model for public sector finance to enable private sector participation in a least developed country to support low carbon growth and climate resilience. The project will crowd in private finance from the issuance of a first-of-its-kind Green/Climate Bond while returns will be re-invested in a Climate Change Trust Fund for Madagascar, which will enable continued investment in landscape level adaptation and mitigation activities in the future.

The Project Vision and Theory of Change

The Project's vision is to facilitate a pathway out of a vicious cycle of resource depletion and increased vulnerability (figure 1). To achieve this, the public sector interventions will focus on working directly with farmers in the CAZ and COFAV landscapes to develop resilient farming communities (figure 2; blue boxes).The public sector interventions are activities designed to build adaptive capacity in the landscape, provide direct support to vulnerable smallholders with the tools and inputs needed to adopt sustainable agriculture techniques, and build capacity of smallholders, community based organizations and local government services. The combined effect of these interventions will create the conditions necessary for smallholder farmers to access larger and longer-term funding such as that provided by the Investment Fund. The Investment Fund will provide private capital to grow enterprises that have developed a basic resilience (figure 2; green boxes), strengthening local markets and completing the pathway out of vulnerability, while contributing to climate change adaptation and mitigation. These investments have a further positive feedback loop by contributing to broader ecosystem conservation efforts that ensure the supply of ecosystem services such as soil stabilisation, local climate amelioration and flood protection. With the support given by the public sector interventions, we expect improved capacity of the most vulnerable smallholders to engage financial and business services such as those provided by the Investment Fund. This will lead households to progress from a situation of high vulnerability and no engagement with markets to improved resilience with some engagement with markets and then on to a situation where they are thriving and in continual engagement with markets.

Figure 1. Rural Madagascar is underdeveloped with the majority of smallholder households vulnerable to extreme weather and market and political forces. The Project's vision is to facilitate a pathway out of a vicious cycle of resource depletion and increased vulnerability.

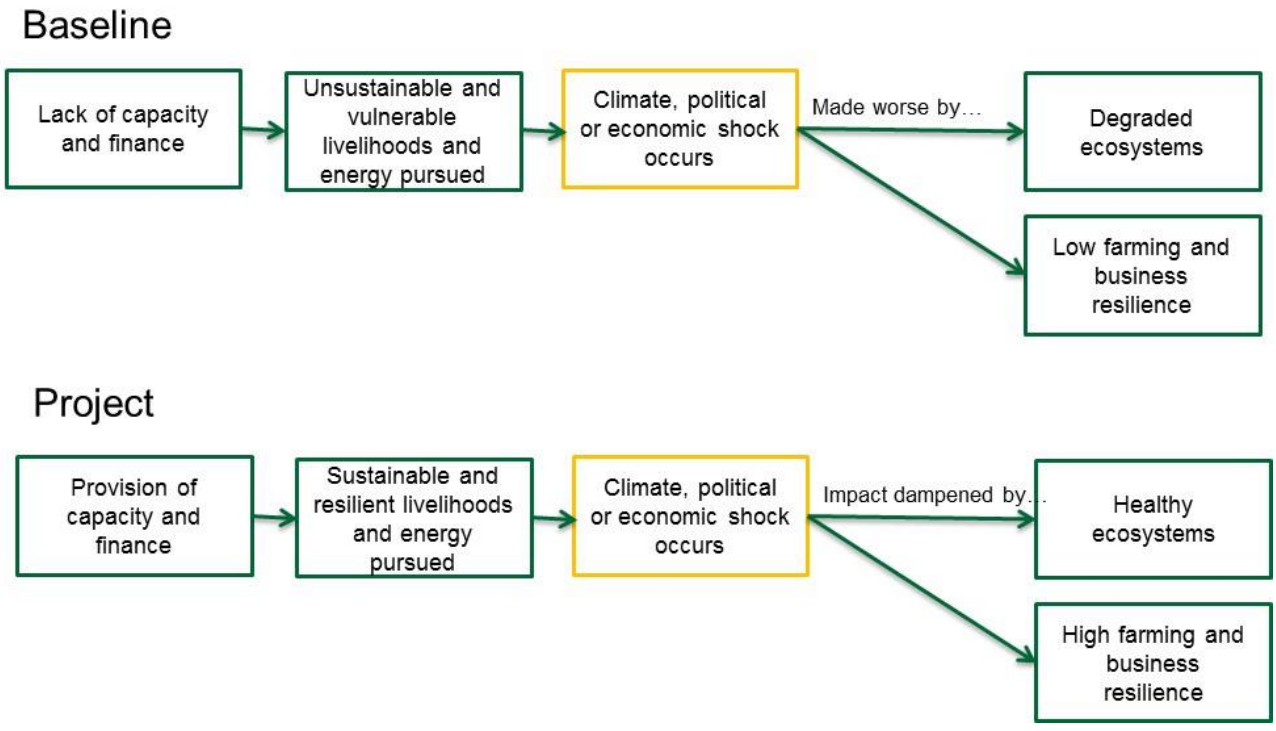
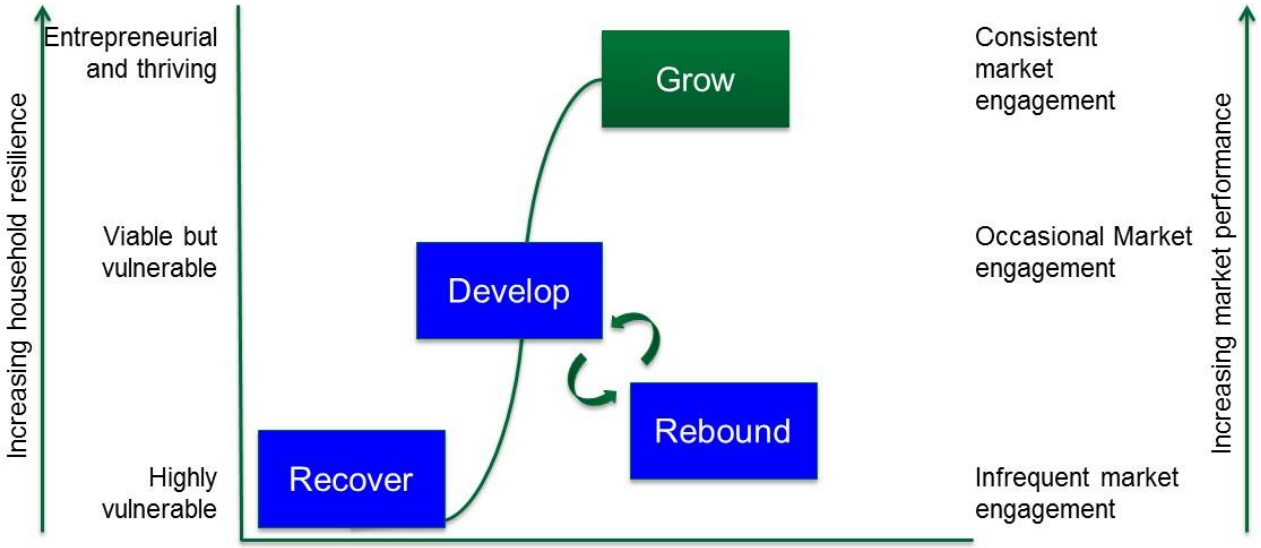


Figure 2. Conceptual model of the relationship between household vulnerability and market engagement. The public sector activities focus on addressing household vulnerability in the blue boxes while the private sector interventions focus on addressing the green "grow" box.

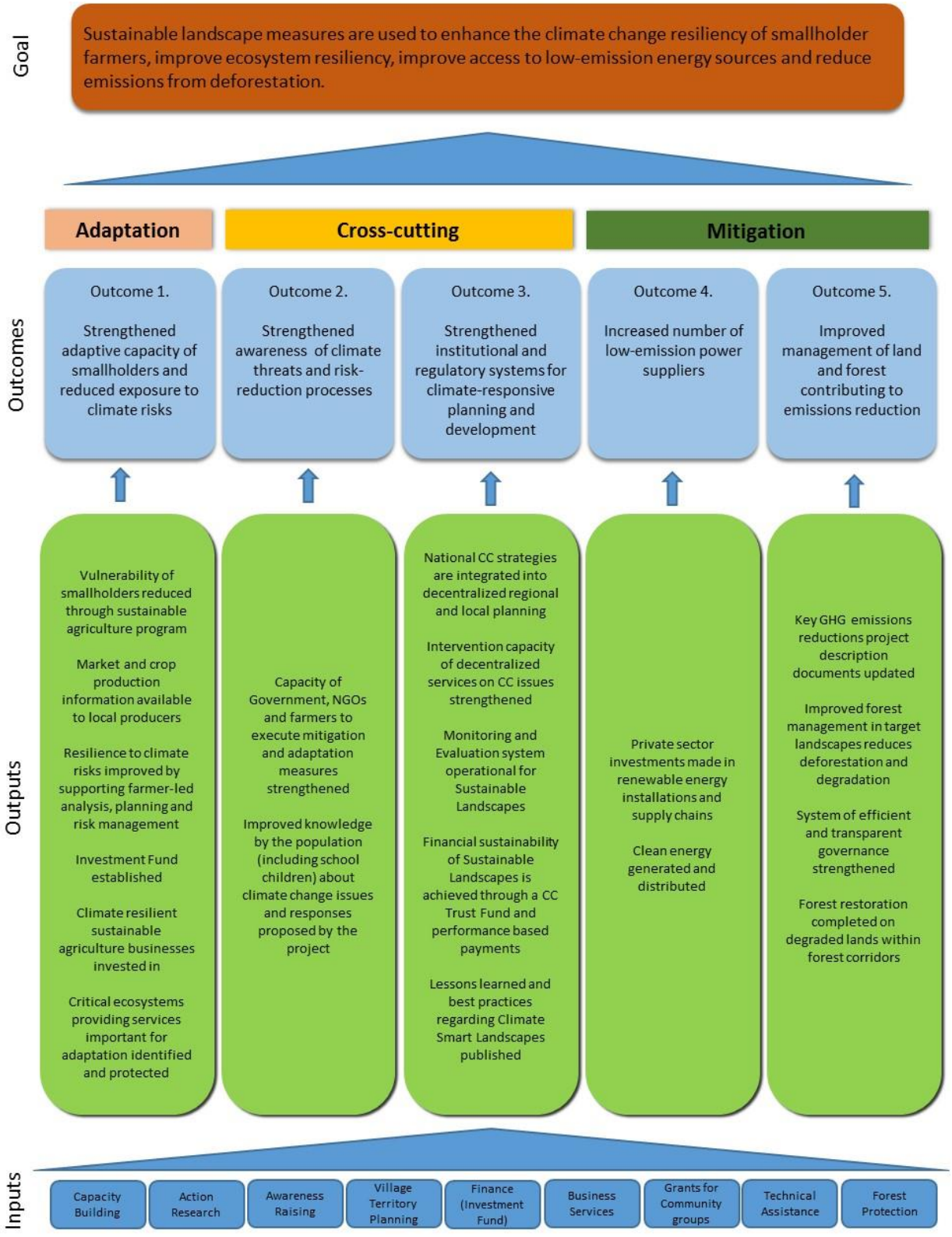


* Model adapted from Catholic Relief Services

A theory of change for the project has been developed that underpins the Project design. From November 2015 through to January 2016, a multi-stakeholder participative process organised through workshops in Antananarivo and the CAZ and COFAV landscapes was used to identify barriers to achieving the project goal and then selecting outcomes, outputs and activities needed to overcome the barriers (see report of the Stakeholder Consultation Process in annex 12a for details). The result of this process is captured as a Theory of Change for the Project and encapsulated in the logical framework used as the basis for planning activities and monitoring (see section H and the workplan presented as annex 10).

The GCF National Designated Authority (the BNCCC) has been fully involved in the preparation of this project through a series of meetings to define the overall objectives, the theory of change, the project logframe, the management structure of the project, and reflections on the Trust Fund. In addition the NDA led meetings with relevant ministerial departments in the development and validation of the logical framework, and exchanges on how to approach the implementation of sub-projects. Finally, four stakeholder consultation meetings in the CAZ and COFAV landscapes were held where representatives of local civil society organisations, local authorities, farmers, students, teachers, and other citizens participated in the development of the logical framework (see section E.5.3 and annex 12a for details).

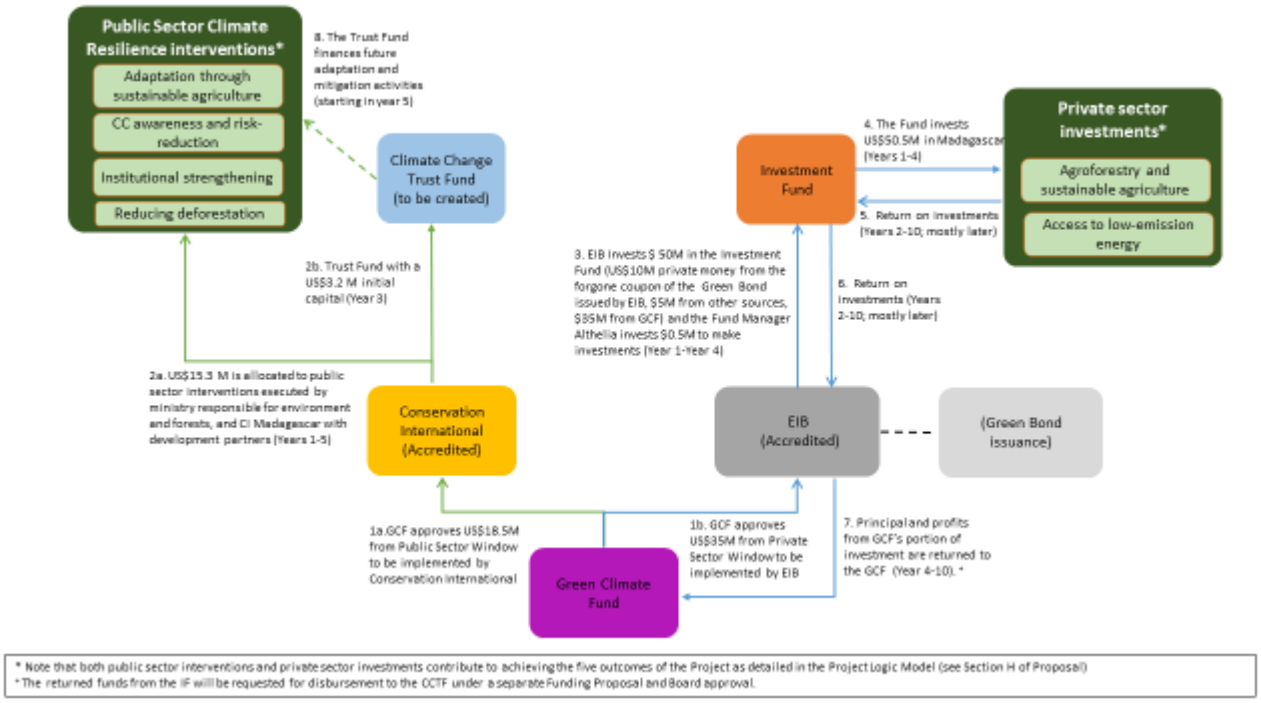
Figure 3. Theory of Change for the Project



C.3. Project / Programme Description

The Project will combine three financial streams to achieve the stated goal, outcomes and outputs as shown in figure 4: 1) the public sector interventions (implemented by CI) will be financed from a US$15.3 million grant; 2) the private sector investments will be made through a US$50.5 million Investment Fund (with a US$35 million equity participation from GCF to EIB, a US$10 million green bond issued by the EIB and US$5.5 million from additional sources); and 3) over the course of the project a national, on-shore Climate Change Trust Fund will be established with an initial capital of US$3.2 million grant funding from GCF that will subsequently be further capitalised with the GCF portion of the return on investments (principal and profit) made by the Investment Fund (subject to development of a new proposal and approval by GCF).

Figure 4. The structure of the Project showing financial flows



Geography

The Project will be implemented primarily in the landscapes of the Ambositra Vondrozo Forest Corridor (known by its French abbreviation, COFAV) and the Ankeniheny-Zahamena Forest Corridor (known as CAZ). These landscapes, which are not part of a REDD+ jurisdiction, were selected because: a) they have large populations of highly vulnerable smallholder farmers; b) they experience extreme weather events that are projected to get worse; c) they contain some of the last remaining intact forest areas in the country and are critical for the country's efforts to reduce emissions from deforestation; d) the local communities that live in and around those two sites depend heavily on natural forests for income generation, building materials and other services; and e) the agricultural systems and landscapes offer significant potential for the broad-scale adoption of climate-smart agriculture and the concurrent increases in adaptive capacity, mitigation, and improved agricultural production. Climate-smart investments from the Investment Fund will also be made in additional landscapes with ongoing climate change mitigation work, and renewable energy investments will be made in high potential areas in rural Madagascar that have been identified by the Agency for Rural Electrification (ADER). See annex 9 for map of project intervention areas. Each and every investment made by the Investment Fund (whether being categorised A, B or C) will be subject to a comprehensive environmental, social and governance (ESG) due diligence to confirm the strict adherence to the Althelia ESG Standards, which includes IFC Performance Standards and the EIB Environmental Guidelines (see annex 6 for a detailed Environmental and Social Management Plan for the Project).

Project outcomes and outputs

The Project will use a landscape approach to climate change mitigation and adaptation that blends together best practices from sustainable agriculture, reduction of emissions from deforestation and integrates public and private sector interventions to achieve the desired outcomes. We will also mainstream the adoption of climate-smart landscape measures into national policies and programs.

Further details on the five Project outcomes are provided below (see section H and annexes 2a, 2b and 10 for more detail on activities). To clarify alignment with GCF's Performance and Monitoring Framework, the relevant GCF outcome code is indicated in brackets.

Outcome 1. Strengthened adaptive capacity and reduced exposure to climate risks (GCF ref. A 7.0)

This outcome of the Project will address adaptive capacity within landscapes by promoting sustainable agriculture and introducing ecosystem-based adaptation measures. The public sector activities will focus on the most vulnerable smallholder communities within the CAZ and COFAV landscapes and will use a gender-sensitive farmer participatory approach to identify climate risks and location-specific adaptation measures and techniques to promote sustainable agriculture (see annex 2a for further details). As part of the participatory planning, important habitats (e.g. vegetation providing erosion control, forest areas around water catchments, etc.) providing ecosystem services will be identified and measures adopted for their protection or restoration. This component will have a particularly important emphasis on identifying the different needs and challenges of male and female farmers and on empowering women engaged in agriculture as well as identifying and addressing the needs of particularly vulnerable groups (e.g. migrants and young adults with limited opportunities for land acquisition).

Key to the long-term success of sustainable agriculture is that smallholders are able to successfully engage with markets by both accessing finance when needed and being able to sell their products with added value. In this context the Investment Fund is a critical part of the Project's model and will invest in sustainable agriculture businesses to the benefit of smallholders. The Investment Fund's model is designed to return significant social impacts and is further described below and in annex 2b.

The outputs under this outcome are:

- *Output 1.1. Vulnerability of smallholder farmer communities to climate change impacts is reduced through the establishment of a Sustainable Agriculture (including Climate-Smart Agriculture) Program;*
- *Output 1.2. Market and crop production information available at local level to inform crop production type and improve market access;*
- *Output 1.3. Resilience to climate induced shocks and other risks is improved by supporting farmer-led gender-sensitive analysis, planning and risk management;*
- *Output 1.4. An Investment Fund is established and managed to invest in sustainable agriculture and renewable energy enterprises;*
- *Output 1.5. Investments are made in climate resilient sustainable agriculture businesses* (through the Investment Fund); and,
- *Output 16. Critical ecosystems providing essential ecosystem services to smallholder farmers communities in current and future climate conditions are identified, assessed and managed (protected or restored) as ecosystem-based adaptation measures.*

Outcome 2. Strengthened awareness of climate threats and risk-reduction processes (GCF ref. A 8.0)

This outcome addresses the need for information and training on climate change. An important barrier identified during the project design was the lack of knowledge about climate threats and practical measures that could be used to address them[28]. To address training needs, the Project will develop training modules and provide trainings that are suitable for three main audiences: 1) professionals working within government and civil society organisations, 2) academic training materials suitable for integration into university courses and, 3) materials targeted at community groups. Training materials will be designed to integrate gender considerations for each training topic and, for community groups, will be designed to be accessible for those with low literacy or without prior knowledge of climate change. The Project will also work closely with the Ministry of Education to develop teaching materials on climate change suitable for primary and secondary schools. These materials will be developed, tested and deployed specifically for the CAZ and COFAV landscapes to address learning needs identified in the national curricula, but using local examples whenever possible.

The outputs under this outcome are:

- *Output 2.1. Capacity of government employees, local conservation and development NGOs, farmer groups and local communities to implement mitigation and adaptation measures to achieve Climate-Smart Landscapes is strengthened; and,*
- *Output 2.2. Knowledge of the CAZ and COFAV population (including school children) about climate change issues and responses proposed by the project is improved.*

[28] Harvey et al. 2014. Extreme Vulnerability of smallholder farmers to agricultural risks and climate change in Madagascar. Phil. Trans. R. Soc. B 369:20130089

Outcome 3. Strengthened institutional and regulatory systems for climate-responsive planning and development (GCF ref. A5.0)

Under this outcome the Project will strengthen regional institutions in climate-responsive planning and development. Madagascar has been moving towards increasingly decentralized governance arrangements over the last decade. In 2004, 22 Administrative Regions were created and these have the responsibility for developing Regional Development Plans. In addition to the Regions, Municipalities (Communes) have responsibility for developing Commune Development Plans. Currently climate change considerations are not included within these plans and the Project will help to update existing plans integrating climate change issues into them. The Project will also strengthen key regional government services including the agriculture, livestock, and forestry services. Their capacity will be strengthened though better equipment, training and the full participation of these services in the execution of the project. Capacity building will include skills on being gender-sensitive to ensure that both male and female smallholder farmers are able to access these government services.

A monitoring and evaluation system will be developed that serves both the project but also provides key information to regional decision makers through a publicly accessible Landscape Accounting Framework that provides an interactive dashboard to allow users to view and analyse data, and feeds information into national databases such as for national forest monitoring (to be developed as part of the FCPF-supported REDD+ program). See section H2 for further information on monitoring and evaluation.

The Project will also enable the creation of a new institution that is part of the country's climate change policies, namely a Climate Change Trust Fund. Further information on the Trust Fund is provided below. Finally, the Project will ensure that best practices and lessons learned from the Project activities are integrated into relevant national and regional strategy documents.

Outputs for this outcome are:

- *Output 3.1. Strategies and actions identified in national climate change policies are integrated into decentralized planning at regional and local levels;*
- *Output 3.2. Intervention capacity on climate change issues of decentralized technical services is strengthened;*
- *Output 3.3. The monitoring and evaluation system for Climate-Smart Landscapes is operational and informs adaptive management;*
- *Output 3.4. Financial sustainability of project activities is achieved through a combination of the Trust Fund and performance based payments; and,*
- *Output 3.5. Lessons learned and best practices regarding Climate-Smart Landscapes are integrated into relevant documents and relevant structures (environment, agriculture, land-use planning, Communes, Regions etc.).*

Outcome 4. Increased number of low-emission power suppliers (GCF ref. M 6.0)

This outcome will be achieved entirely through the Investment Fund and seeks to provide access to energy such as low GHG emitting power and fuel. The exact investments will depend on further studies, but could include renewable energy (e.g. micro-hydro, solar, etc.) as well as alternative sources of energy (e.g. ethanol production for cook stoves, etc.). Working with the Agency for Rural Electrification (ADER), Althelia has identified several potential investments, all of which will have significant social impact as well as direct improvements to livelihoods. Two outputs are included in this outcome:

- *Output 4.1. Private Sector investments are made in renewable energy installations and supply chains; and,*
- *Output 4.2. Clean energy is generated and distributed.*

Outcome 5. Improved management of land and forest or improved management contributing to emissions reduction (GCF ref. M 9.0)

This outcome will be achieved entirely through the public sector activities and aims to reduce emissions from deforestation in two natural forest corridors, CAZ and COFAV, that contain some of the highest carbon stocks in the country. Both corridors have been established as landscape-scale REDD+ pilot initiatives with the strategy to reduce deforestation by creating and managing new protected areas that were formally established in 2015. The fundamental hypothesis for reducing deforestation in CAZ and COFAV is that local forest-stakeholders must gain a net benefit from the implementation of the protected area if deforestation is to stop. To achieve this, the protected areas are being used as a framework to provide local people with improved rights over the use of the forest resources in community use areas and viable alternative livelihoods to deforestation for farmers living at the forest's edge. These combined activities are intended to encourage more productive land uses over the medium- and long-term.

Community groups are co-managers of the protected areas along with Conservation International (currently designated by the government to fulfil this role) and they play an essential role in local enforcement and monitoring of threats to the forests. It is intended that a combination of upfront investment (during this project) and performance-based payments (after the project) for reducing GHG emissions will cover the improved forest management costs in the long-term, including providing direct payments to local people working on the conservation of the areas. To this effect, both CAZ and COFAV are accredited under the Verified Carbon Standard and

monitoring of emissions reductions will be done according to these standards. In addition to the forest protection activities, this outcome includes planned forest restoration in degraded areas within the forest corridor that will have mitigation benefits.

Outputs under this outcome are:

- *Output 5.1. Key planning documents (management plans and Verified Carbon Standard Project Descriptions) for CAZ and COFAV are updated;*
- *Output 5.2. Forest management (community patrolling and surveillance, ecological monitoring, boundaries demarcation/maintenance) is improved as outlined in the CAZ and COFAV management plans and Verified Carbon Standard (VCS) Project Descriptions (PDs);*
- *Output 5.3. A system of efficient and transparent governance is strengthened for CAZ and COFAV; and,*
- *Output 5.4. Forest is restored on degraded lands within the CAZ and COFAV protected areas/carbon project areas.*

Further details on the activities under each outcome and output are provided in section H and in annexes 2a, 2b and 10. As mentioned above, two funds are involved in this project and merit further explanation: 1) the private sector activities will be achieved through the Investment Fund, and 2) a permanent national Climate Change Trust Fund will be an important output of the project that continues to support climate adaptation and mitigation activities in the future.

The Investment Fund

The Investment Fund's approach is to make available US$50.5 million to be invested into two main types of activities:

1. Sustainable Agriculture will be pursued by reinforcing sustainable supply chains from production to transformation from community-based activities further away from the conservation zone. This will be on land-grown commodities (such as vanilla, cocoa, spices, etc. for indicatively 75% of the allocation to Sustainable Agriculture) ensuring full traceability and zero-deforestation, as well as aqua-culture (sustainable fisheries, algae production, sea fruits, etc. for indicatively 25% of the allocation to Sustainable Agriculture), both activities having significant social impacts. Both land and coastal investments will provide sustainable livelihoods, reducing the pressure of unsustainable land use and deforestation.
2. Access to energy, by giving access to low GHG emitting power – for instance small renewables (<5MW solar, small scale hydro, wind, or agrienergy), for indicatively 50% of the allocation to Access to energy, and 50% for fuel efficiency – as described for Outcome 4 (GCF ref. M6.0) above. These investments will have significant social impact as well as direct improvement on livelihoods.

Investments will mainly take the form of loans (mostly Profit Participation Loans), although the use of equity investment into organisations already in existence can be considered. In every investment, significant weight will be given to the replicability and scalability of the activity, to ensure development and growth of initiatives.

These investments are expected to return significant social and climate impacts, as well as reasonable profits, which pave the way for replication of these investments at a larger scale and to attract more private capital into Madagascar.

During the first six months of operation the Investment Fund will be established and then it will make investments up to the end of the fourth year of the Project.

The Investment Fund will be governed by clear investment eligibility criteria that include: counterparty eligibility requirements (i.e. which beneficiaries); qualifying investment criteria; and industry-leading environmental and social governance requirements (based on Althelia's existing Environmental, Social and Governance (ESG) Standard adapted for the context of this Investment Fund and EIB/GCF requirements). See section E6.4 and annex 6 for more details on environmental and social considerations.

Qualifying Investment criteria for the Investment Fund

Criteria	**Draft requirements**	
	Sustainable Agriculture	**Renewable energy**
Investment size	US$0.5-4 million Based on private sector interviews it was determined that greater investment sizes are unlikely due to the absorption capacity of sustainable agricultural enterprises at this time.	> US$2 million Renewable energy investments are very scalable, however, the Investment Fund would cap its investment in any one venture at 15-20% of its total value.
Portfolio allocation	Indicatively 55% of the allocated funds, of which, c. 75% to land-grown commodities and c. 25% to marine-based activities	Indicatively 45% of the allocated funds, of which c. 50% to renewables energy and agrienergy and c. 50% to fuel efficiency.

ESS category	B or C (but with full compliance with the Fund's ESG standards)	B or C (but with full compliance with the Fund's ESG standards)
Investment type	Mostly debt / PPL	Mostly equity
Investment location	Preferentially in the vicinity of government or NGO REDD+ activities or forest areas under threat of conversion.	See left. In addition, site suitability will be strictly assessed relative to ESG requirements.
Indicative investment types	Agroforestry, aquaculture, forestry, supply chain, primary processing, storage, export. A balanced portfolio of domestic and export related investments will be sought.	Micro hydro, bio-energy (production, processing and distribution), solar.
Targeted beneficiaries' types	Activities dedicated to practices that are demonstrated to be resilient to climate related risks, increase local adaptive capacity (for example through diversification of incomes), reduce poverty, and work to protect and enhance local ecosystem functions. Mainly cooperatives of small holders (50 to 200 members) or even small/medium sized companies (e.g less than US$5m turnover) that have a proven development model and customer base, but require growth capital.	Activities providing locally suitable and value for money energy supplies that can supply urban or rural populations with renewable energy. This can be small/medium sized companies or even family organisations deploying Access to Energy strategies in Madagascar.
Mitigation	Quantifiable CO_2 sequestration and emissions reductions at the location of intervention. High performing GHG efficiency (tCO_2/unit commodity). Evidence of contribution to broader REDD+ objectives in the landscape.	Quantifiable GHG emissions reductions associated with substitution of business as usual energy sources.
Co-investment opportunity	Demonstrable private sector co-investment	

Further details on the Investment Fund Design are provided in annex 2b. A model is provided in annex 3b, and a narrative document to explain the model can be found in annex 3d.

The Madagascar Climate Change Trust Fund

To create a sustainable environment for climate change adaptation and mitigation activities at the national level, at the request of the GCF Focal Point, a Climate Change Trust Fund will be created at the beginning of the project and a series of activities to support its subsequent operation will be carried out. The Trust Fund has been identified as a national priority in Madagascar's Climate Change Strategy[29]. The detailed modalities of the Trust Fund will be determined with the government of Madagascar during the project but it will be incorporated in Madagascar under the law 2004-014 on Trust Funds (*Refonte du Régime des Fondations à Madagascar*) with an independent governance structure and with the purpose to support activities in Madagascar The Trust Fund will add to the financial sustainability of the grant investment by GCF and allow financing of further adaptation and mitigation activities beyond the end of the Project.

The overall purpose of the Trust Fund will be to establish a mechanism that will be able to receive and coordinate bilateral, multilateral and private donor support for climate adaptation and mitigation measures that have been identified by the government as priorities and are in-line with international agreements. A more finessed purpose statement and delineation of the Trust Fund operations and investments will be an output of the project and is expected in year 2.

Given the large scope of the Climate Change Trust Fund, the GCF Focal Point has indicated that this should be a separate Trust Fund rather than attempting to merge it with the existing biodiversity-focused fund. The activities to be funded under the Project include: a feasibility study/assessment of options (including making use of existing structures), the establishment of the Trust Fund as an Institution (fund statutes, governance arrangements, internal regulations), the development of the Fund's strategy, investment policy and the set of procedures for the operationalisation of the Fund and the financial support for the first years of activity.

[29] Government of Madagascar 2010. Politique Nationale de Lutte contre les Changements Climatiques

The Malagasy legislation on Trust Funds (*law 2004-014 portant sur la refonte du Régime des Fondations à Madagascar*) requires an initial capital to be invested at the creation of the Trust Fund and US$3.2 million is requested from the ***GCF Public Sector Window*** to provide the initial seed funding to establish the Fund. Once established, the staff and board of the new Trust Fund will work to attract additional contributions, including developing a proposal to the GCF to request a sum equivalent to the initial equity participation and returns form the Investment Fund that is part of this project. CI has extensive experience of setting up over 20 Trust Funds (see section E.5.2) and will support the new Fund. An important output of the work with the Trust Fund will be to build its capacity and to support efforts to potentially become a GCF accredited entity.

The decision on the best modality/set-up for the Trust Fund will depend on a) if it can flow down GCF standards regarding ESS and fiduciary standards, b) is deemed suitable for serving the identified purpose of the Trust Fund, c) has the government support and d) is in line with best practices known for Trust Fund development.The intended governance structure for the Trust Fund and general modalities has been provided in a dedicated Term Sheet(annex 5c).

C.4. Background Information on Project / Programme Sponsor (Executing Entity)

The Project will be co-executed by the BNCCC, part of the Ministry in charge of Environment and Forests (MEEF), Conservation International and Althelia. BNCCC and CI through its Madagascar Program will co-execute the not-for-profit public sector activities, whereas Althelia will execute the for-profit investment activities with monitoring of GCF requirements by the European Investment Bank. The Government of Madagascar (GoM) will be represented on the Project's Steering Committee as well as in the Project Management Unit responsible for the day-to-day implementation of the project. As such, GoM representatives and in particular the GCF Focal point will play a critical role in monitoring the Project, assessing execution, evaluating results and providing recommendations. The Government of Madagascar will also be represented on the supervisory board of the new Climate Change Trust Fund to be created during the Project. Background information is provided on the three co-executing entities below.

Conservation International's Madagascar Program

CI has worked for more than 24 years in Madagascar protecting the country's biodiversity and empowering the government, civil society groups, and communities to improve the country's natural resource management. In Madagascar, CI has pioneered efforts to develop a new model of protected areas that engages the communities that use the natural resources in collaborative management arrangements. CI Madagascar has worked with the government to identify priority areas for conservation and to develop new policy and legislation that strengthens the rights of local people and allows civil society to play a more prominent role in managing areas for conservation.

CI Madagascar has a robust team that includes operations, finance, forestry, social science, climate change, biology, ecosystem services, remote sensing, and reforestation, economic, and conservation agriculture specialists. The Madagascar-based team has designed and is implementing REDD+ pilot landscape initiatives in the Ankeniheny-Zahamena corridor (CAZ) and Ambositra-Vondrozo (COFAV) that have been validated and verified under the Voluntary Carbon Standard program (see http://www.vcsprojectdatabase.org/#/project_details/1311 , http://www.vcsprojectdatabase.org/#/project_details/1047), and in addition COFAV was validated under Climate Community and Biodiversity Standard (CCBS, see http://www.climate-standards.org/?s=COFAV). The projects also apply the World Bank's social safeguard requirements (see the World Bank's website for the CAZ ESMP and COFAV ESMP).

The management team is supported by a highly qualified Operations and Finance team based also in Madagascar and the office will be supported by several of CI's technical teams worldwide: the Ecosystem Finance Division (EFD), The Betty and Gordon Moore Center for Science, The Grants Policy and Management team, as well as the Africa Field Division. CI will draw on its experience from its involvement in designing and implementing avoided deforestation, restoration, sustainable landscape and ecosystem-based adaptation projects all over the world, including in Peru, Brazil, Fiji, Cambodia, Colombia, Honduras, Costa Rica, Guatemala, Indonesia, DRC, Kenya, South Africa and the Philippines. Drawing on CI's extensive country programs, scientific expertise, and long list of partnerships, CI is well-positioned to execute the proposed Project and generate significant global benefits.

Bureau National de Coordination des Changements Climatiques (BNCCC)

The BNCCC was created in March 2015 (through Decree No. 2015-09) in recognition of the need to have a government entity to coordinate and lead activities related to climate change in Madagascar. The Director of BNCCC has been designated as the GCF Focal Point for Madagascar. The mission of the BNCCC is twofold: 1) to promote climate change adaptation to improve economic resiliency and 2) to promote a sustainable, low-GHG emissions resilient economy within the national economy.

The BNCCC's main attributions are therefore to coordinate and implement climate change actions, programmes and projects, to monitor and verify additionalities regarding climate change responses, to facilitate and provide administrative and technical support to all stakeholders working on climate change issues, to mainstream climate change actions into public and private sector policies and strategies, to elaborate and disseminate strategic documents related to the ratification of the UNFCCC, and to manage and disseminate information and techniques to adapt to and mitigate climate change.

The BNCCC is made up of five units: the Adaptation Unit, the Mitigation Unit, the Database Management Unit, the Project Management Unit, and the Financial Sustainability Unit. The BNCCC staff are highly experienced at executing climate change programmes and projects (currently executing three projects), as well as in providing technical recommendations regarding climate change actions. The BNCCC uses rigorous technical and financial monitoring and procurement procedures following government standards that are accepted by various United Nations agencies (note that for this project, CI's GCF financial and procurement guidelines will apply).

The BNCCC's direct involvement in executing this project will help to ensure strong coordination among all direct and non-direct stakeholders, given its strong, established relationships with all climate change actors including the Climate Change National Committee that gathers all public sector partners, as well as all technical and financial partners including local associations, national and international NGOs, and other civil society groups. It is also expected that the BNCCC will be reinforced and will improve its own capacity, as well as other stakeholders' experience through this first GCF project in Madagascar and its role in chairing the Project Steering Committee.

Althelia

Althelia Climate Fund GP SARL was incorporated in December 2011 and is the current general partner for the Althelia Climate Fund with the support of Ecosphere Capital Partners LLP, its Investment Adviser. These companies were set up by experts specialised in climate finance, cumulating more than 25 years of expertise in climate-related investments and have two main goals:

1. To raise capital from diversified and broad sources to be allocated to climate-related investments, mainly in the land-use and land restoration fields.
2. To deploy the raised capital in an innovative and effective way in order to maximize the expected outcomes (climate, conservation, social impact) while abiding by the most rigorous ESG requirements, as well as delivering reasonable return to investors.

Their first fund, Althelia Climate Fund was launched in 2012 and closed at EUR 100 million with investments from large public and private institutional investors.

Althelia has negotiated innovative financial instruments such as the first-ever forest carbon guarantee with USAID (for an amount of US$133 million) and worked with Credit Suisse to issue the first-ever Nature Conservation Notes to the bank's private banking clients willing to invest in the Althelia Climate Fund.

Althelia has successfully implemented, or is implementing, impact investment approaches in several countries (Brazil, Peru, Guatemala, Kenya, etc.) combining preservation of forest with development of sustainable productive activities (certified deforestation-free commodities such as cocoa, coffee, cattle, spices, etc). Althelia published its first impact report in early 2016, which describes precisely impacts and outcomes achieved with its investments.

The Investment Fund (likely to be called the "Althelia Madagascar Climate Fund") will build upon the expertise of Althelia and its adviser Ecosphere Capital Partners and their experience in the development, operationalization and implementation of the Althelia Climate Fund both in terms of deployment of capital, investment due diligence and assessment, ESG requirements, impact monitoring and operations (booking, financial monitoring). A dedicated entity, Ecosphere Madagascar, that will include five to seven full time employees, would be created to co-advise on fund management along with London-based Ecosphere Capital Partners.

For simplicity, where the distinction is either obvious or not crucial for understanding, the three entities Althelia Climate Fund GP Sarl (General Partner), Ecosphere Capital Partners LLP (London-based advisor) and the to-be-created Madagascar-based advisor, Ecosphere Madagascar, are referred to as 'Althelia'. See annex 2b for more details on the fund design and governance structure.

C.5. Market Overview (if applicable)

Please see section B4.

C.6. Regulation, Taxation and Insurance (if applicable)

CI Madagascar has an agreement with the Government of Madagascar through the "*Accord de Siège*" that governs its activities in Madagascar. The "*Accord de Siège*" is renewed every two years and it has always been renewed, allowing CI to operate uninterrupted in Madagascar for over 24 years. Under the agreement, CI is required to follow national laws regarding taxation, social and fiscal regulations and human resources management. Notably, Value-Added Tax is applicable to in-country operations, CI follows rules regarding non-governmental organization's obligations for fiscal and tax reporting, CI pays social and fiscal taxes for national staff (and income taxes for international staff), and the labour law is applicable for national staff.

The Investment Fund will be incorporated in Luxembourg and there is no specific licensing necessary to make private investments in Madagascar. The Fund will abide by the national regulatory and tax framework in place in Madagascar and its investments will be subject to the standard tax rates in the country.

The Investment Fund adviser, Ecosphere Madagascar, will be established according to Malagasy legal and fiscal policies, most likely as a *Société à Responsabilité Limitée* (SARL). [30]

At the investment level, all projects will undergo a legal due diligence conducted by local counsel to ensure that all necessary legal permits and licenses are in place and that any regulatory requirements are completed. Continued compliance with all legal requirements will be monitored on an ongoing basis.

As part of the financial due diligence prior to all investments, the tax liabilities will be understood and built into project financing plans. Audit accounts and records of tax payments will be used to monitor the ongoing compliance of investment with local tax laws.

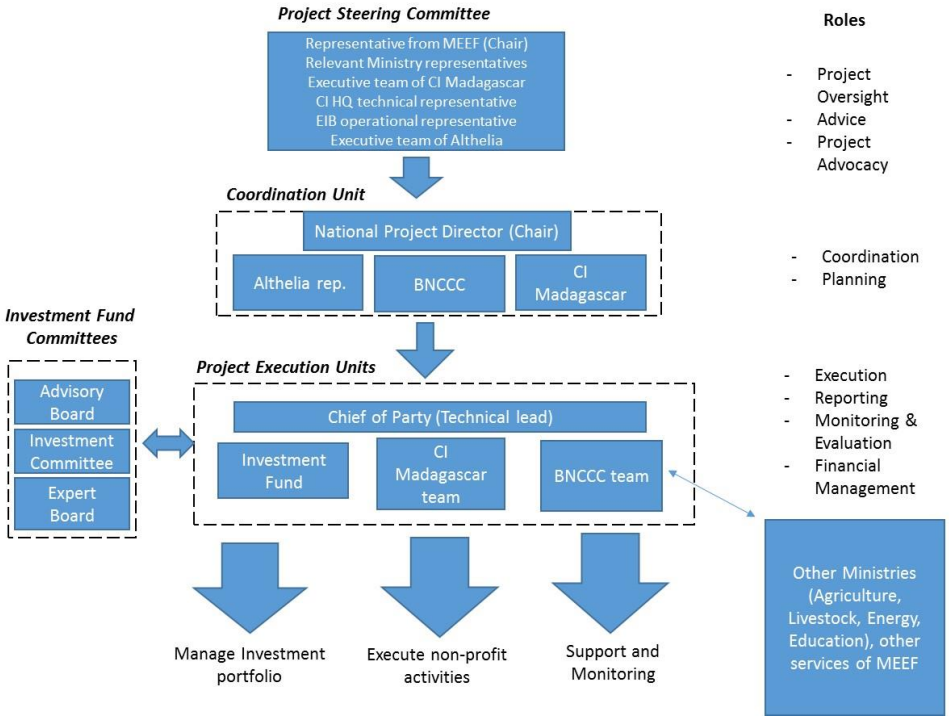
The Madagascar Climate Change Trust Fund will be an independent foundation with a recognized public utility status and governed by Madagascar's legislation on foundations (law 2004-014).

C.7. Institutional / Implementation Arrangements

In this section information is provided on both the governance structure and the contractual arrangements for the project. CI will be responsible for the public sector components of the project and EIB will be responsible for the private sector components. The overall governance will be ensured through the Project Steering Committee as described below.

Governance Structure

Figure 5. Proposed Project Governance Structure



The partners in the Project are the following:

- **Conservation International**, a GCF accredited entity, through its division *CI-GCF Implementing Agency,* will support project implementation by maintaining oversight of technical and financial management aspects related to the public sector activities, and by providing assistance upon request of the Co-executing Entities. The CI-GCF Implementing Agency will also monitor the achievement of the project outputs, and ensure the proper use of GCF funds for the public sector activities including the Trust Fund creation and Operationalization (the requested US$18.5 M grant). The CI-GCF Implementing Agency has policies in place describing the process to be followed for arbitration, accountability and grievance;
- **The EIB**, as a GCF accredited entity, through its Mandate Management Directorate, will ensure implementation of the private sector activities through oversight of Althelia's technical and financial management of the US$50.5 M Investment Fund. The EIB has the necessary policies in place for implementation of GCF projects as described during its accreditation process;
- **The GCF *National Focal Point*** will ensure that activities implemented by the Project align with strategic national objectives and priorities including REDD+, and help advance ambitious action on adaptation and mitigation in line with national needs; and,

[30] https://en.santandertrade.com/establish-overseas/madagascar/investing-3

- *The Co-Executing Entities* (EEs) will lead the execution and monitoring of specific parts of the project:
  - **BNCCC**, part of the Ministry responsible for Environment and Forests (MEEF);
  - **Conservation International** through its office in Madagascar;
  - **Althelia Climate Fund GP SARL** will manage the Investment Fund (see section C4 for details); and,
  - **The future Climate Change Trust Fund**, an independent foundation with a recognised public utility status and governed by Madagascar's legislation on foundations, will become a co-executing entity once it is created.
- The Project will establish a *Project Steering Committee* (PSC) led by a Government of Madagascar representative and with representatives from the accredited entities and each co-executing partners. Its principal functions will be providing strategic guidance and oversight to project implementation; review progress and evaluation reports; discuss problems or strategic issues that might arise during implementation, and provide support for the necessary inter-institutional coordination and contributions to project activities;
- A *Coordination Unit* composed of representatives from the Co-Executing Entities and chaired by a National Director will ensure that the Project maintains its strategic focus and that synergy is maintained between the different project components;
- The *Project Execution Units* (PEU) will be responsible for operative planning and day-to-day execution of the activities under the project components, as well as for monitoring and reporting of project outputs and outcomes. The PEUs will also identify, manage and monitor project risks with reporting of any new risks to the PSC and Coordination Unit. These units will prepare and support PSC meetings and manage the budgets. The PEUs will receive important technical, administrative and institutional support from CI-headquarters, EIB and the Co-Executing Entities. The PEUs within CI and BNCCC will be further integrated into one Project Management Unit (PMU) for executing the public sector activities and will have an important responsibility to ensure country ownership of the Project; this applies particularly to the empowerment of communities. The PMU will pursue a bottom-up approach giving time to communities to take ownership of the proposed activities and adapt them to their own vision and needs; and,
- Terms of reference for the Project Steering Committee, Coordination Unit and Project Execution Units are provided in annex 14.

In addition to the overall Project management structure, the Investment Fund will have its own dedicated governance structure for a closer management and oversight of the activities:

1. The Advisory Board will provide a forum where the General Partner (GP) may discuss potential or actual conflicts of interest, meet periodically to review compliance by the General Partner and the Expert Board with the Investment Principles, the Investment Objective and Strategy; and approve any appointment and replacement of key personnel or changes in the Project documentation. The Advisory Board will be composed of three members (Conservation International, the European Investment Bank, the third member currently under discussion between investors and the GP).

2. The Expert Board, appointed by the General Partner and approved by the Advisory Board, will provide the Investment Fund Manager with technical insights so as to assist the manager with contemplated investments, especially in the field of ESG, financial risk management and technical expertise (conservation, agriculture, energy). The Expert Board will not make any decisions in relation to the making or realisation of an investment, but will provide the Investment Fund Manager with an educated opinion on transactions contemplated by the Investment Fund.

   The Expert Board will be comprised at all times of one representative of Conservation International, two to three other expert figures with relevant experience in conservation and sustainable production, amongst whom at least one will also have relevant credit-risk management experience and one social expert with relevant experience in IFC Performance Standards.

3. The Investment Committee will be exclusively competent to take the final decision on whether to make an investment or divestment subject to compliance with the Investment Objective and Strategy, Investment Restrictions, Investment Principles and Divestment Policy and Limits. The Investment Committee will act at all times in the best interest of the Investment Fund.

   The Investment Committee will be comprised at all times of two to three members appointed by the Investment Fund Manager, subject to the approval of the Advisory Board. Further detail on governance arrangement for the Investment Fund, including draft terms of reference for the three committees is provided in annex 2b.

Contractual Arrangements

In accordance with the terms of the draft Accreditation Master Agreement (Draft AMA), the GCF and CI will enter into a Funding Activity Agreement (FAA) following the approval of the Project by the GCF Board. Per Clause 6.03 of the Draft AMA, the FAA shall be consistent in all material respects with the approved Funding Proposal and the Term Sheet.

The Draft AMA provides that an Accredited Entity may carry out functions of an Executing Entity. CI operates in several countries through branch offices or CI controlled affiliated entities. CI Madagascar is a branch office of Conservation International Foundation. Consequently, for the not-for-profit activities, instead of having a subsidiary agreement, CI intends to develop an internal memorandum to clarify roles and responsibilities between the two divisions involved at the implementing and executing levels (i.e., the CI GEF/GCF Agency Division and CI Madagascar).

Conservation International may grant funding to co-executing entities identified in section A of the proposal following completion of the required due diligence and execution of subsidiary agreements.

For the components of the project implemented through CI's Madagascar Country Program Office, CI headquarters will provide oversight conducted by several independent monitoring units.

- As part of CI, the Madagascar Country Program is required to follow CI's comprehensive operating policies and procedures (the GCF received these procedures as part of CI's application for accreditation). These policies and procedures cover legal, administrative, human resources, and financial requirements.
- At the most basic level of oversight, the financial compliance of the CI's country program offices, including the Madagascar Country Program, is overseen by the Africa Field Program Regional Office based in Nairobi. The Nairobi-based Senior Director of Operations, together with the Regional Senior Vice President ensures the office complies with CI's policies and procedures as well as donor specific requirements. As required, this team oversees, reviews and approves the offices contracting, budgeting and spending.
- CI's headquarters-based Finance Division provides more granular oversight over the offices financial transactions. This unit reviews the country program's financial activities on a monthly basis, ensures accounts are up to date and accurately entered, and provides further assurance that the office is compliant with CI's financial policies and procedures. HQ Finance is responsible for reviewing and evaluating each Country Office's monthly request for funding. Headquarters' Finance Team will delay sending funds to offices should their monthly review of that office reveal deficiencies until the deficiencies are addressed.
- A Regional Risk Management Officer that reports to the Regional Operations Director and the headquarters-based Director of Risk Management and Compliance performs regular testing of transactions of each Country Program Office to monitor compliance, accuracy and validity of transactions. Any findings are reported to management for corrective action and resolution.
- CI's Internal Audit Unit performs internal audits on each Country Program on a 2-year revolving cycle. Any findings are reported to management for corrective action and resolution.
- In the case of GCF-funded projects, CI's GCF Finance & Operations Director will review the Project's quarterly financial reports submitted by the Madagascar Country Program. The GCF Finance & Operations Director has access to all Project-related financial activities and supporting documentation, which is maintained in CI's accounting system (see below). The GCF Finance & Operations Director works closely with the GCF technical staff to ensure that the Project's financial activity is consistent with the technical work performed.

CI's accounting system is Unit4 Business World (formerly Agresso) ERP system, an industry-leading integrated set of financial management and accounting applications to classify expenses by natural category, donor, project, cost center, strategy, and outcome. The Business World system is implemented globally throughout CI, so CI has full visibility into all financial information in all of its Country Program offices. The system utilizes electronic approval processes that are auditable and reportable. In addition, all transactional support, including contracts, agreements, invoices, receipts and any related documentation is maintained electronically in the system permitting review and audit from any location.

For the components of the project that CI will sub-contract to partners, including BNCCC, CI would monitor sub-recipients as outlined in our Grants and Contracts Manual (the GCF received this manual as part of CI's application for accreditation):

- All sub-recipients of GCF funding are required to comply at a minimum with CI's standard provisions for grant management as outlined in CI grant agreements;
- CI's headquarters-based Grants Management staff will conduct pre-award financial due diligence on the sub-recipient to gain an understanding of that organization's structure, history, organization, management, financial capacity and accounting system;
- Based on the results of this assessment, the CI team will assign a risk rating for the sub-recipient and establish a monitoring program appropriate for the assessed risk level. Depending on the risk level, monitoring protocols could include monthly or quarterly financial reporting, which may include submission of detailed transactions and associated supporting documentation for the expenditures;
- In addition to review of financial reporting, CI will conduct periodic site visits to the sub-recipient to review financial transactions on-site, interview staff, and confirm programmatic progress;
- In the case of this project, the CI Madagascar office has numerous highly-qualified grant management staff that will support the monitoring of sub-recipients, in accordance with CI's grant management policies and procedures; and,
- CI's Grant Management practices are also subject to review by CI's Regional Risk Management Officers and Internal Audit Unit as described above.

For the for-profit activity, the European Investment Bank, as the accredited entity will subscribe shares into the Fund, through the signature of Subscription Agreements and side letters:

- for the portion related to its ACP ISFF, or US$ 5 million - note that formally the Subscription Agreement for this portion of investment will be legally slightly different as the ACP facility can only provide loans, but economically, it will have the same characteristics (fees, voting rights, etc) than equity participation; and,
- for the GCF portion, or US$35m – this amount and use of the funds being primarily governed by the FAA.

In addition,

- for the portion related to the forgone coupon of the Bond issuance, or US$10 million - practically, a tailored Special Purpose Vehicle will be set up by EIB and the Bond's originating bank and used once the Bond is issued by the EIB to manage an upfront amount of US$10 million corresponding to the present value of the forgone coupon: the custodian agent for the SPV will execute a Subscription Agreement to the Investment Fund for this amount; and,
- The Fund Manager will enter directly into a Subscription Agreement for an amount of US$0.5m, as to guarantee alignment of interest between investors and the fund manager.

The Investment Fund will be incorporated in Luxembourg, where it will be overseen by the Luxembourg Financial authorities (CSSF). The role and responsibilities of the Fund Manager and Investors will be formalised in the Article of Incorporation of the Fund and the CSSF-supervised Private Placement Memorandum (PPM) of the Fund, which will define precisely the roles and rights of the EIB, and the possibility to remove the Fund Manager especially in case of underperformance. Althelia will act as the Fund's General Partner.

The Fund's so called General Partner which is in practice the Fund Manager will sign Investment Advisory Agreements with its two partners: (1) Ecosphere Capital Partners, a partnership incorporated in the UK that is currently advising other funds managed by the Investment Fund Manager and will be in charge of transversal operations (ESG, financial reporting, etc.), and (2) Ecosphere Madagascar, a company to be incorporated in Madagascar, which will be in charge of overseeing investments (due diligence, contracting, reporting, etc.). For its work, the Fund Manager will be entitled to a management fee of 2% of the managed investments, fully documented in the PPM.

C.8. Timetable of Project/Programme Implementation

Further detail on expected impacts, outcomes, outputs and activities is provided in section H and a detailed implementation plan is provided as annex 10.

OUTPUT	Q1	Q2	Q3	Q4	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10
1. Vulnerability of smallholder farmer communities to climate change impacts is reduced through the establishment of a Sustainable Agriculture Program					D								
2. Market and crop production information is available at local level to inform crop production type and improve market access													
3. Resilience to climate induced shocks and other risks is improved by supporting farmer-led, gender-sensitive analysis, planning and risk management													
4. An Investment Fund is established and managed to invest in sustainable agriculture and renewable energy enterprises			C										E
5. Investments are made in climate resilient sustainable agriculture businesses (through the Investment Fund)													
6. Critical ecosystems providing essential ecosystem services to smallholder farmers communities in current and future climate conditions are identified, assessed and managed (protected or restored) as ecosystem-based adaptation measures													
7. Capacity of government employees, local conservation and development NGOs, farmer groups and local communities to implement mitigation and adaptation measures to achieve Climate-Smart Landscapes is strengthened													
8. The knowledge-level of the populations of CAZ and COFAV (including school children) about climate change issues and responses proposed by the project is improved													
9. Strategies and actions identified in national climate change policies are integrated into decentralized planning at regional and local levels													
10. Intervention capacity on climate change issues of decentralized technical services is strengthened													
11. The monitoring and evaluation system for CSLs is operational and informs adaptive management		C											
12. Financial sustainability of project activities is achieved through a combination of trust fund and performance-based payments													

13. Lessons learned and best practices regarding Climate-Smart Landscapes are integrated into relevant documents and relevant structures (environment, agriculture, land-use planning, Communes, Regions, etc.)													
14. Private sector investments are made in renewable energy installations and supply chains													
15. Clean energy is generated and distributed													
16. Key planning documents for CAZ and COFAV are updated													
17. Improved forest management as outlined in the CAZ and COFAV management plans and Verified Carbon Standard (VCS) Project Descriptions (PDs) is implemented													
18. A system of efficient and transparent governance is strengthened for CAZ and COFAV													
19. Forest restoration on degraded lands within the CAZ and COFAV protected areas/carbon project areas is implemented													
20. Overall coordination and Project Management													

Grey indicates activities planned related to the output and red indicates achievement of output or a significant milestone – D: “Designed”; C: “Created”; E: “Exit”

D.1. Value Added for GCF Involvement

The GCF was created in response to developing countries concerns that they would be the most affected by climate change and the least capable of financing the cost to adapt. The communities surrounding CAZ and COFAV are emblematic of this predicament. The people in these communities are already seeing the impact that climate change has on their traditional way of life. For the public sector activities, the only alternatives would be to secure funding for the planned activities from the Malagasy government or other donors. In practice the government does not have the necessary budget to fund projects at scale and funding that could be available from other donors is insufficient, sector-focused and is not coordinated to tackle climate-change challenges at the landscape scale as proposed. The Climate Change Trust Fund that will be set up as part of this project will address these issues and will be an opportunity for GCF to see its initial investment leveraged and continued in perpetuity.

GCF's involvement in the Investment Fund activities is essential because as described in section B4, Madagascar lacks sources of available capital for private investment in climate-related activities, especially community-based sustainable agriculture and access to energy. Most of the financial instruments are dedicated, through the existing nine commercial banks and eight private equity organisations, to small- and medium-sized enterprises, mostly in fast growing sectors such as telecom, agro-business and retail. There is no financial offering for communities' and farmers' organisations where lies the largest potential to lead a transformational change of land use, which is critical to ensure reduction of deforestation and enable the deployment of a climate-resilient environment in Madagascar.

Furthermore, Madagascar is perceived as a high-risk country by most of the institutional and private investors (see Doing Business ranking in sections B3 and C1), and therefore attracting private capital in the country for innovative financing is very challenging and would require significant expectation of profit to mitigate the perceived risk, such high profitability being incompatible with the targeted beneficiaries. Without the participation of the GCF as a key investor in the Investment Fund, it would be impossible to raise further private funds for climate-related investment in Madagascar.

Through this investment GCF will pioneer a new and innovative investment model for developing countries that will: a) target climate change investments in rural and forested areas, b) successfully crowd in private sector funding, and c) directly improve the lives of the most vulnerable groups to climate change. This project will demonstrate GCF's pivotal role in building a bridge between large-scale investors and vulnerable, poor communities affected by climate change.

D.2. Exit Strategy

Sustainability of project activities has been an over-riding consideration during the design stage. The three intervention mechanisms (public sector activities, the Investment Fund and the Climate Change Trust Fund) are each designed to ensure long-term sustainability. Ultimately the Project model aims to decrease the need for public funding over time and increase the potential enterprises ready to take on private investments (as explained in section C2).

The **public sector activities** specifically include ones to ensure sustainability:

1. Empowerment of government stakeholders associated with the involvement of the National Climate Change Coordination Office (BNCCC) to ensure national appropriation, accountability, and sustainability.
2. Climate change planning will be mainstreamed into regional and municipal development planning within the target landscapes.
3. The project has been designed to involve, support and strengthen decentralized services (e.g. agriculture, forestry) and local government structures in efforts to promote climate-smart measures, thereby ensuring that ownership of the challenge and capacity rests in national and permanent institutions.
4. Applied research, policy briefs and lessons learned documents will be published and disseminated.
5. Sustainable agriculture techniques introduced to communities have been thoroughly researched (see annex 2a for details) and are technically feasible and a financial analysis has been used to identify the techniques that will maximize returns on investments and therefore have the best chance of being self-sustaining and indeed self-replicating.
6. Capacity building activities have been planned throughout the project and for multiple stakeholders to ensure that the necessary capacity to continue to identify, use and execute climate-smart measures is in place beyond the end of the project.
7. Lessons learned from the main project themes including sustainable agriculture, REDD+, Ecosystem-based Adaptation will be fed back into national policy development, thereby encouraging replication.

The **Investment Fund** is, by design, a long-term financing instrument. With a lifetime of 10 years it will provide financing over a much longer period than traditional bank finance, the length of time needed for businesses to establish themselves and reap the benefits of sustainable production methods. Investments will be designed in a way that leaves the beneficiaries in a profitable state that are then able to access more traditional finance for any further growth. In this sense the fund is catalytic, moving sustainable enterprises from the fringe to the mainstream economy.

While leaving a legacy of robust sustainable enterprises, the principal invested by the GCF, as well as any profits, is ultimately intended for the Climate Change Trust Fund so that further sustainable activities can be supported in the long run in Madagascar. The Trust Fund modalities are to be defined during the Project to ensure that the fund is created in line with the country's priorities.

Furthermore, as the Investment Fund Manager and the accredited entities are committed to disseminate broadly this investment approach and expected outcomes, it is likely that this will pave the way very quickly for other funds investing in other parts of Madagascar or in other countries/regions with the same objective of transforming and adapting their economy to climate change, driving to a sustainable and virtuous circle of investment.

It is expected that the knowledge of the underlying approach for the benefit of the targeted beneficiaries as well as the way to raise private funding through the issuance of green/climate bonds, will allow a quick replication and scaling-up of this innovative mechanism in and outside of Madagascar.

In this section, the accredited entities are expected to provide a brief description of the expected performance of the proposed project/programme against each of the Fund's six investment criteria. Activity-specific sub-criteria and indicative assessment factors, which can be found in the Fund's Investment Framework, should be addressed where relevant and applicable. This section should tie into any request for concessionality made in section B.2.

E.1. Impact Potential

Potential of the project/programme to contribute to the achievement of the Fund's objectives and result areas

E.1.1. Mitigation / adaptation impact potential

The project is expected to make significant impacts and a major contribution towards advancing Madagascar's national priorities on tackling climate change and in particular the country's Intended Nationally Determined Contributions (2015). The Project activities contain both adaptation and mitigation measures and associated impacts. These are summarized below with respect to the GCF Impact areas. The logical framework in Section H provides further details on targets for these impacts and how they will be achieved and measured.

Adaptation

- *Impact: 1.0 Increased resilience and enhanced livelihoods of 114,000 highly vulnerable people, communities, and regions*

The Project's sustainable agriculture support for the most vulnerable households and the investments into climate-smart sustainable agricultural enterprises will bring new livelihood opportunities to an estimated 85,700 rural men and women. In addition, 28,300 men and women are expected to have improved resiliency because of jobs created in businesses where the Investment Fund invests.

- *Impact 2.0 Increased resilience to health and well-being, and food and water security 85,700 people, beneficiaries*

The project's sustainable agriculture activities are expected to lead to improvements for the food security of 85,700 people. In addition, by providing cheap energy in forms that do not require laborious collection of material or degradation of the local environment, the beneficiary population, particularly women who bear the brunt of collection and are highly impacted by cooking smoke, will have increased time available for more productive activities, and benefit from healthier local ecosystems and homes where highly polluting charcoal and firewood are displaced. Through the improved management of landscapes, improved environmental services as expected to provide indirect benefits for an estimated 1 million beneficiaries living in the broader CAZ and COFAV landscapes around the project intervention area.

- *Impact: 4.0 Increased resilience of ecosystems and ecosystem services in 655,832 hectares of native forests (CAZ et COFAV)*

Traditionally agricultural expansion has been at the expense of ecosystems as soils, forests and rivers are degraded. The Project will work to directly protect the forests of CAZ and COFAV, which provide important ecosystem services, and to protect and restore ecosystems within the broader landscape that are identified as providing important services. Improved regional and local development planning, capacity building for organisations responsible for environmental protection and awareness raising activities also contribute to achieving this impact. The **Investment Fund** will only invest in enterprises that protect and enhance ecosystems using techniques such as agroforestry and production-conservation models with high sustainability standards.

Mitigation

- *Impact: 1.0 Reduced emissions through increased low-emission energy access and power generation*

Wood energy (including wood and charcoal) represents 93% of the total energy supply in Madagascar in 2012. About 7.5% comes from petroleum products (burnt in power stations) that are all imported; this represents an increasing burden for the national budget. The power generation supplied by hydro, solar, and wind represents 0.001% of the total energy supply in Madagascar. Therefore the challenge for Madagascar, and the Project objective is to provide renewable energy sources to the population that do not involve degradation of forests or further diesel burning.

- *Impact: 4.0 Reduced emissions from land use, deforestation, forest degradation, and through sustainable forest management, and conservation and enhancement of 655,832 hectares of native forest carbon stocks*

As described above agricultural expansion and energy provision have often come at the expense of deforestation and forest degradation. By protecting the 655,832 hectares of native forests in CAZ and COFAV and by investing in zero-deforestation agriculture that protects and enhances local forests, particularly in areas that are on the frontiers of deforestation, the Project will contribute to the national objectives to reduce emissions from deforestation.

The GHG emissions reduced or avoided by the Project will be generated from two types of intervention and the calculation methodologies are as follows (see annexes 2a, 3b and http://www.vcsprojectdatabase.org/#/project_details/1311, http://www.vcsprojectdatabase.org/#/project_details/1047 for calculation details):

- Avoided deforestation from CAZ and COFAV has been calculated based on validated Project Description documents using Verified Carbon Standard methodology VM0015 and assuming that the projects will have similar annual expected Emission Reductions (ERs) for the period 2017-2021 as was calculated for 2008-2017[31]. Similar ERs are assumed for the project period because deforestation drivers surrounding the project area have remained the same and indeed deforestation nationally has intensified during the period of political instability since 2009[32]; and,
- Avoided deforestation from the **Investment Fund**'s sustainable agriculture investments in other landscapes in Madagascar have been assumed to equate to 0.5 hectares of deforestation reduced over the project lifetime for every one hectare where investments are made (see annexes 2b and 2d for details).

The 114,000 expected beneficiaries with reduced vulnerability/increased resilience includes:

- 85,700 people expected to directly benefit from sustainable agriculture support (more resilient agriculture and strengthened risk management strategies); and,
- 28,300 additional people expected to have improved resilience due to job creation (improved/more stable financial situation).

For the other relevant indicators mentioned:

- The 448,000 people that are expected to benefit from access to renewable energy sources is based on estimates for a portfolio of the **Investment Fund**'s potential investments that have been identified as priorities by the Government of Madagascar agencies;
- The area of protected forests refers to the forests of CAZ and COFAV; and,
- The number of people benefitting from sustainable management of forests and agricultural lands, and their associated ecosystem services refers to the people expected to derive these benefits in the CAZ and COFAV landscapes.

The proportion of beneficiaries relative to the total population has been based uniquely on the planned activities within CAZ and COFAV since the geographical boundaries for these are well defined and therefore official population statistics exist for these areas. By contrast the exact location of the Investment Fund's investments is still to be determined during the project. For this calculation we assume that the investments will benefit a similar proportion of the population of the target area as for the activities planned for CAZ and COFAV.

We are not aware of any comparable projects that simultaneously address the same scope of climate change issues at multiple landscapes at the scale proposed and therefore direct comparisons are hard. The avoided deforestation components will generate GHG ERs similar to other projects in similar circumstances. The economies of scale for the proposed sustainable agriculture activities mean that they are expected to reach a higher proportion of the total population in the target areas than other projects that have tested sustainable agriculture activities within Madagascar.

E.1.2. Key impact potential indicator

Provide specific numerical values for the indicators below.

GCF core indicators	*Expected tonnes of carbon dioxide equivalent (t CO_2 eq) to be reduced or avoided (Mitigation only)*	*Annual*	1MtCO_2eq
		Lifetime	10MtCO_2eq
	• *Expected total number of direct and indirect beneficiaries, disaggregated by gender (reduced vulnerability or increased resilience);* • *Number of beneficiaries relative to total population, disaggregated by gender (adaptation only)*	*Total*	562,000 (114,000 improved resilience and 448,000 with low emissions energy access) (281,000M; 281,000F) Estimated 1 million indirect beneficiaries
		Percentage (%)	3% of total population of Madagascar[33] (of which 50%M;50%F)

[31] See annex 2a for further discussion of assumptions
[32] Office National de l'Environnement et al. 2015. Changement de la couverture de forêts naturelles à Madagascar, 2005-2010-2013. Antananarivo.
[33] Based on population estimates of 500,000 in the COFAV landscape and 347,520 in CAZ landscape

Other relevant indicators	• Protection of 655,832 hectares of native forests and other habitats home to globally important biodiversity and their associated ecosystem services within the CAZ and COFAV protected areas; • Indirectly benefit one million people through the sustainable management of forests and agricultural lands, and their associated ecosystem services; • Increase in generation and use of climate information in decision-making; • Strengthen adaptive capacity to overcome climate risks.

E.2. Paradigm Shift Potential

Degree to which the proposed activity can catalyze impact beyond a one-off project/programme investment

E.2.1. Potential for scaling up and replication (Provide a numerical multiple and supporting rationale)

Scaling-up and replication of a new Investment Fund Model

Successful implementation of this project will result in a new, replicable, long-term and sustainable funding model for developing countries, including least developed ountries that are in need of climate investments at scale in rural and forested areas.

The issuance of the US$300 million climate bond with the forgone coupon being used to invest in Madagascar is a first-of-its-kind and it is expected that this innovative channelling of private funds to investments that are traditionally viewed as inherently risky and low yielding has a high potential for replication. Green bonds and climate bonds are an increasingly attractive asset class for institutional investors, doubling in size every year. Although the amount dedicated to the Project's investments is limited to US$10 million, the bond contemplated by the EIB (the "Madagascar Climate Bond") to channel private funds into the Investment Fund will be one of the most impactful climate bonds to date, by taking direct risk in underlying landscape projects. The involvement of the EIB in this proposal is a demonstration of the interest of the institution to leverage subsequently on the experience gained with the issuance of the Madagascar Bond for further issuance of the same type. Even most conservative calculations show the potential and significance of this new funding model in unlocking new sources of climate finance (see below).

Only a limited number of institutional investors are able to directly invest in structures such as the Althelia Madagascar Investment Fund. The reasons include: a) their limited asset allocation to "non-traditional" investment classes; b) the small size of such structures compared to their minimum investment tickets; c) the cost of due diligence for such investments; e) the high capital consumption when structures are closed-end funds (e.g. under Solvency II for insurance companies); and e) the lack of track-record and/or the pilot character of such investments.

Their fiduciary duties mainly justify the high weight such institutional investors allocate to bond investments, which on average constitute more than two-thirds of their portfolios. The international bond market, which represents 30% of today's US$120 trillion global bond market's outstanding amount, is privileged by institutional investors for its potential in terms of risk diversification, good liquidity and generally high investment-grade credit rating of its issues.

A potential amount of US$3.6 billion could be made available by institutional investors per year to push the climate and conservation agendas by this approach. That amount is in addition to investments in labeled green bonds - whose principal proceeds are fully dedicated to impact investments - and unlabeled impact-aligned bonds. These figures are based on conservative assumptions in the international bond markets: a) new issuance would represent per year 10% of the outstanding amount (or US$3.6 trillion); b) the NPV of the new issuance's coupons amounts to roughly 10% of their principal (or US$360 billion); and c) *only one percent* would be bonds whose coupons are partially or fully dedicated to impact investment structures or projects such as in the Madagascar Climate Bond.

This Investment Fund will be used to prove the concepts that: 1) public finance, like that of the GCF, can be used to leverage private sector finance at scale; 2) investible projects that meet both financial and impact criteria can be sourced in a developing economy like Madagascar, and 3) such a project can return profits to investors.

As this is demonstrated the model can easily be rolled out to other geographies either in Madagascar or in other countries. More precisely:

1. In Madagascar, there are more than 100 protected areas that could benefit from the Investment Fund's approach of investing in sustainable agriculture in high biodiversity-value landscapes with high climate risk. Furthermore, the sustainable finance resources for the majority of these protected areas are lacking. Replicating the model of the Investment Fund in other landscapes with protected areas could achieve at the same time improved conservation, reduced deforestation and land degradation and improved economic development.
2. Outside of Madagascar, the proposed model of an Investment Fund for transition of land use is well suited for most vulnerable countries, where unsustainable agriculture is taking an increasing portion of available land, driving to deforestation, degradation of soil and an agricultural sector not resilient to climate change. The Investment Fund could be replicated (but not exclusively) to Africa's 34 Least Developed Countries to finance the activities required to hit the targets set in their Intended Nationally Designated Contributions (INDCs) and National Adaptation Programmes of Action (NAPAs).

Additionally, scaling-up climate-smart landscape measures, including sustainable agriculture, and forest conservation and reforestation, to other areas will be possible through the availability of information generated through this project on the effectiveness of the sustainable landscape measures and their scaling potential. Higher priority for implementation will be given in cases where there are multiple practices for dealing with a given risk, those practices that are easiest to adopt, can be broadly used, require little labour, demand few inputs, are compatible with local cultural practices, and are low-cost. In addition, practices that address unique risks, are particularly innovative and merit further exploration, or are gender-specific, will also be highlighted.

E.2.2. Potential for knowledge and learning

Component 2 (Enabling Conditions) includes outputs specifically related to creating and strengthening of knowledge, enhancing learning and ensuring that relevant capacity rests within local and national institutions beyond the life of the Project. The Project will combine the use of applied research, new information and communication technologies, and will valorise indigenous and traditional knowledge to promote climate-smart landscapes and ecosystem-based adaptation. The knowledge and learning materials developed by the Project can be used to replicate similar landscape-scale programs. The Project will contribute to improved knowledge of climate change issues and solutions, including:

- The development and piloting of a gender-sensitive method to quickly assess where the most vulnerable farmers are within the corridors, and what climate-smart agriculture options are most likely to confer both adaptation and mitigation benefits;
- The development and implementation of a detailed gender-sensitive monitoring and evaluation system, including GHG and safeguards monitoring, that allows quantifying the social, ecological and climate impacts of the different project interventions, and evaluate the cost-effectiveness of different sustainable agriculture activities;
- While the research would be designed for the Malagasy sites, the methodologies developed would be globally applicable to other tropical regions with large smallholder populations that are similarly interested in adopting climate-smart practices to promote agricultural productivity, adaptation and mitigation;
- Lesson learnt from the best climate-smart landscape measures identified and implemented will be shared with key stakeholders working in climate sensitive sectors and mainstreamed into the national and regional plans and strategies on climate change adaptation and mitigation through workshops and development of policy briefs;
- An important component of this project will be the communication and dissemination of the results. Provision has been made to share results with farmers, policy makers, and participating organizations on most effective practices; and,
- As Madagascar is developing its REDD+ strategy, the results obtained from the avoided deforestation component will help to inform the development of the strategy.

The structures that are already in place, such as community associations, technicians from regional authorities and decentralized services, will be the main targets. These actors will thus have the knowledge necessary to become involved and contribute to the development of the various planning processes that impact the landscapes such as regional and local development plans, land-use planning, and conservation management plans.

Through Althelia, the Project will also contribute to generating and disseminating knowledge relevant to the private sector both nationally and internationally. The Investment Fund Manager, Althelia Climate Fund, routinely shares knowledge and lessons learned through publications on their work, as well as regular participation in national and international conferences. Althelia is one of the founding members of the Global Impact Investing Network, whose role is precisely to disseminate best practices in terms of impact investment and reporting of impacts. We anticipate that the innovative nature of the Climate Bond will generate a lot of interest in this project among investors and highlight how private investments can contribute to climate change impacts in countries such as Madagascar.

Specifically, the Investment Fund Manager (Althelia Climate Fund GP **SARL**) will contribute to improve knowledge and disseminate lessons learnt from its investments with the Althelia Climate Fund in other parts of the world to the Malagasy audience, being the public sector (namely through the BNCCC, but also other relevant government departments) as well as private entities such as financial institutions. In particular, the Investment Fund Manager will become an active member of the Malagasy Association of Private Equity (AMIC) where it will communicate the investment realised, with the objective of driving more private investment into climate change mitigation and adaptation.

E.2.3. Contribution to the creation of an enabling environment

The Project includes an entire component dedicated to creating the enabling conditions necessary to sustain, scale-up and replicate climate-smart landscape measures beyond the end of the project. The planned activities will:

- Strengthen the technical capacity of key government agencies, universities, local NGOs and other key stakeholders on effective climate-smart landscape measures, which deliver both adaptation and mitigation benefits, while enhancing livelihoods and maintaining the provision of key ecosystem services. This will be conducted through the development of modules related to climate-smart landscapes that will be used for training and the development of policy briefs to share during local and national workshops;
- Strategies and actions identified in national climate change policies will be integrated into decentralized planning at regional and local levels, thereby providing the framework for guiding future climate resilience work**;**
- Strengthen the intervention capacity of decentralized technical services to deal with climate change issues; and,
- Ensure that there are financial resources beyond the end of the project to finance ongoing climate-smart interventions in high value landscapes within Madagascar by creating and providing capital investment in a Climate Change Trust Fund.

Although the public sector activities will build on research and pilot "climate-smart agriculture" activities that have been tested in Madagascar, the large landscape-scale at which the project will operate and its integration within the official development agenda of the regions will be innovative within Madagascar. Through the combination of a strong technical approach and the emphasis on involving and strengthening national and decentralized government agencies in its execution, we believe this project has great potential for replication and expansion as a larger program within the country.

The proposed Investment Fund will combine public (GCF) and private sources and it will be the first time finance has been available at scale for sustainable agriculture targeted specifically at Madagascar helping innovative enterprises take their successes to scale.

The financing package is truly pioneering and innovative in several aspects:

1. It will make available, at scale, finance to beneficiaries which are currently excluded from the Malagasy financial system but have however, through implementation of sustainable agriculture practices, the potential to drive the transition of the economy towards more resilient landscapes.
2. The expected outcomes are both climate-related, in the form of reduced deforestation and land degradation as well as renewable energy, and social and economic, with the build-up of high-value, fully-certified, fully-traceable agriculture in Madagascar, allowing to create long-term and sustainable revenues for beneficiaries.
3. The main proposed approach to make finance available is profit participation loans (see section B4 for more details) which is best fitted to the targeted beneficiaries and will allow a shift away from business as usual practices.

The private sector will contribute US$10 million to the Investment Fund through the issuance of a US$300 million Climate Bond by the European Investment Bank. The fact that a portion of the bond issuance is targeted to finance mitigation of and adaptation to climate risk in one of the world's least developed countries, whilst the rest of the issuance is channelled toward more traditional uses (energy efficiency and renewable energy projects mainly in Europe) is a first-of-its kind. It provides a replicable model that allows large institutional investors which are usually only looking at large bond issuances, with underlying investments located in investment-grade countries, to start deploying capital into climate-related investments in least developed countries. See section, 'Scaling-up and replication of the Investment Fund Model' in E2.1 above for an explanation of the innovative features of the Investment Fund.

E.2.4. Contribution to regulatory framework and policies

- At the national level, Madagascar has strategic adaptation plans and policies in place such as the National Adaptation Programme of Action (NAPA) and the National Policy for Climate Change (PNLCC). Various efforts have been conducted at the national and subnational levels, including research and workshops on climate change impacts and adaptation strategies. However, those plans include limited information on climate-smart landscape approaches. Since those plans will likely need to be updated to improve resilience of smallholder farmers to climate risks and to link adaptation and mitigation efforts in agricultural and forest landscapes, the results of this project will inform those plans and contribute to their effective implementation especially regarding the adaptation of farmers. Both CAZ and COFAV have been chosen as priority sites for the existing national program on climate change.
- The National Adaptation Plan (NAP) is under development.
- The Project will come up with an adaptation plan for CAZ and for COFAV by incorporating gender-sensitive climate-smart landscape approaches into their already existing management plans. Because of CI's position as a co-manager of both protected areas, CI will ensure that these management plans are adopted and implemented beyond the life of this project. The Project will also produce a policy brief on climate-smart landscape measures appropriate to the two corridors.

- The proposed activities are closely linked to the National Development Plan, particularly action statement 5 (Valorisation of natural capital and improvement of resilience of rural people to natural disasters). In addition, the Project supports actions in the Gaborone Declaration for Sustainability in Africa (GDSA[34]), including actions 2 (Building social capital and reduce poverty) and 3 (Build knowledge, data, capacity and policy network).
- The Project will make significant contributions to ongoing national policies, plans and processes related to REDD+, to adaptation and to agricultural development (Madagascar National Pact to support the Agriculture-Livestock-Fishery Program).
- The Project is also well aligned with the dispositions of the new Energy Policy (as set out in the *Lettre de Politique Énergétique*) that Madagascar published in 2015. This document places great weight on the importance of developing renewable energy sources and extending rural electrification.

Through close collaboration with the Malagasy Government the Investment Fund will work with and feed-back into the national and local legal frameworks. Furthermore the Project includes the design and implementation of a Climate Change Trust Fund that will further enable acquisition of knowledge for low-emission policies.

E.3. Sustainable Development Potential

Wider benefits and priorities

E.3.1. Environmental, social and economic co-benefits, including gender-sensitive development impact

For Madagascar, a country ranking among the poorest and most vulnerable countries in the world, making progress on global frameworks such as the Sustainable Development Goals (SDGs) 2030 Agenda is of its highest priorities. The proposed project directly responds to 12 out of the 17 SDGs. The scale and the ambition of this new global Framework requires innovative solutions to be tested through non-traditional partnerships.

As explained in section C.1 and E.5, the Project is well aligned with, and contributes to, national priorities and strategies in addition to those that are specific to climate change. As such it is expected to generate important economic, environmental and social co-benefits at different scales (local, national and international).

Economic benefits

The proposed public and private sector activities will provide significant and transformative investments in the local economies where the project works. Economic impacts expected from the project include:

- improved resilience of 114,000 people from climate change vulnerable smallholder communities;
- improved access to renewable energy for approximately 448,000 people;
- jobs created for 28,300 people; and,
- trainings provided for 107,100 people (target of 50% men, 50% women).

The Project will improve agricultural techniques, strengthen agricultural extension services, work with farmer cooperatives and small- and medium-sized enterprises and enhance communication systems that can provide economic benefits equitably for local men and women. Examples include the improvement of productivity and quality of agricultural products, establishment of small processing units, improving smallholder farmer access to markets and adding value through better marketing and labelling (e.g. eco-certification), based on a needs assessment with local men and women. The Project seeks to improve and diversify revenues of the most vulnerable households and will contribute to the transformation of family-based agriculture to a market agriculture model. The development of processing and adding value to agricultural product units will contribute to the maintenance or creation of jobs in the sector, and reduce the rural exodus and unemployment, particularly in rural areas.

The emphasis on private sector activities in this project is particularly important for providing economic benefits in terms of growth of private companies, permanent job creation and increasing access to renewable energy that will itself have knock-on economic benefits. The private sector activities are an essential part of moving rural households out of a situation of economic vulnerability and dependency into a situation where they are thriving.

Social benefits

The target landscapes have over a million inhabitants and all of them are expected to benefit directly or indirectly from the Project activities to improve sustainable management of forests, farmlands and protection or enhancement of ecosystem services.

The main positive impacts on the living conditions of the local population include:

- 14,280 households have increased their annual revenues from the marketing of agricultural products;
- improved food security and nutrition of 85,700 people through increased and more efficient agricultural production and diversification of revenue sources;

[34] http://www.gaboronedeclaration.com/; Madagascar has expressed an interest in signing the Gaborone Declaration and has begun the steps necessary to do so.

- an improved integrated water management approach that facilitates access to drinking water (that has positive impacts on the health and well-being of 14,280 households), improvements in irrigation for agriculture and resolves water-use conflicts;
- awareness raised of 107,100 people about climate change issues and practical information on necessary steps to reduce and manage climate hazard risks; and,
- improved access to renewable energy for 448,000 people may result in significant knock-on socio-economic benefits including health benefits (access to communication channels such as radio, television, mobile phones, improved services at local health centres, cleaner lighting and cooking energy sources), education benefits (access to electricity in schools, availability of light for learning at night), and productivity (establishment of machinery for tasks such as preparing/husking grain or drying or storage of agricultural products, access to information through radio/TV/phone allowing decision-making).

Environmental benefits

Multiple environmental benefits will be derived from the Project, including:

- Protection of 655,832 hectares of globally important forests and other natural habitats for biodiversity conservation and ecosystem services;
- The reduction of 10 million tons of greenhouse gas emissions;
- The reduction in the degradation of 14,757ha of farmland;
- Improvements to soil fertility of 14,757ha of farmland; and,

There are co-benefits in terms of forest protection and just under half of the GHG reduction emissions will come from the mitigation component that aims to reduce deforestation and forest degradation within two of Madagascar's most important forests for biodiversity. These benefits will be achieved through strengthening the protection activities for the corridors. Both of the corridors have been set-up as protected areas that are co-managed with local community groups and the project will strengthen the community management of these areas. In addition to protecting biodiversity, the activities will also help to maintain ecosystem services on which the local population depends as well as promoting sound community management of the forest resources.

For the farmland mosaic in the broader landscapes around \high biodiversity value areas, the sustainable agriculture activities will contribute environmental benefits by:

- Promoting techniques to reduce soil erosion and improve soil structure and fertility through sustainable agriculture practices;
- Promoting improved management of water in agriculture; and,
- Making more efficient use of inputs to agriculture such as energy, fertilizers and pesticides.

Gender-sensitive development

In 2011, the World Economic Forum ranked Madagascar 71 out of 135 countries for gender equality, although it is ranked within the top ten countries in Africa[35]. This project has the potential to significantly improve gender equity and women's empowerment within the context of sustainable agriculture and climate change adaptation. Because of men's and women's different roles, responsibilities, and gender norms, men and women are impacted by climate change in different ways. For example, in the agricultural context, women tend to care for household gardens and subsistence agriculture, while men are more likely to engage in for-profit cash crops. Men and women also often have different opportunities to access agricultural support and information, and agricultural land is generally owned by men.

Recognizing these differences, this project will seek to understand and respond to the different needs, concerns, and challenges that men and women face in investing in climate-smart agriculture and clean energy adoption.

Because of its unique position of coordinating a public-private partnership this project will have the opportunity to directly work with the public sector at ministerial and decentralized levels, private sector investors and investees, as well as cooperatives and communities. This will allow for direct access and partnership to a multitude of entities that it will use to ensure that lessons and experiences on gender approaches will be promoted among all project partners and beyond. The project includes a fulltime gender specialist, supported by Conservation International's Social Policies and Practices program who will be focused on making information generated by this project relevant to policy and decision makers to promote inclusion in policy making, learning and amplification.

Specific areas where gender equity and women's empowerment can be improved include:

- Ensuring that both male and female smallholder farmers (and their families) have equitable access to the information, services, technology, and support that this project will provide on climate-smart agriculture,
- Targeting to reach equally male and female smallholders (50-50) for deployment of finance;
- Targeting to reach equally male and female inhabitants (50-50) for activities related to access to energy;
- Providing additional outreach, education, specialized services, etc. as needed, to ensure that female farmers are able to participate and benefit from this project's activities;
- Incorporating discussion and reflection about the gender implications of climate change and small scale agriculture into all training and educational materials produced through this project, including into policy briefs, management plans, and policies when possible; and,

[35] African Development Bank. 2015. African Gender Equality Index 2015. AfDB publication

- Tracking the participation and benefit sharing of male and female participants through sex-disaggregated data, and using that data to inform adaptive management of the project.

A detailed gender Mainstreaming and Analysis Plan is provided in Annex 16.

E.4. Needs of the Recipient

Vulnerability and financing needs of the beneficiary country and population

E.4.1. Vulnerability of country and beneficiary groups (Adaptation only)

Madagascar is one of the most vulnerable countries to climate change in the world. For example, the risk analysis company Verisk Maplecroft ranked Madagascar as the 5th most vulnerable country in the World to climate change in its 2012 report[36]. The country's geographical position in the southwest of the Indian Ocean means that it already experiences several tropical cyclones per year. Compounding to create the high vulnerability are the impacts of extreme weather events on local communities (Ingram & Dawson 2005; Morton, 2007; Harvey et al. 2014), the rate of expected increases in the occurrence of extreme weather events (Tadross et al. 2008) and the high rate of poverty and the lack of adaptation capacity and resources to reduce climate change impacts (Conners, 2011, Kreft and Eckstein, 2014). Smallholder farmers – who constitute 63% of Madagascar's population (WFP, 2014) – are particularly vulnerable to climate change because their land is small and remote, their livelihoods are highly dependent on natural resources, their access to technical support and credit are limited and their poverty rates are high (Harvey et al. 2014). Female smallholder farmers are particularly vulnerable to climate change due to factors such as less access to credit or technical support, dependence on male relatives for access to land, and farming the most marginal land. In addition, funding for helping smallholder farmers adapt to climate change is sorely missing.

There is an urgent need to identify and implement sufficient and efficient adaptation strategies that improve the resiliency of male and female smallholder farmers and their ability to cope with climate change impacts, especially those that can also provide mitigation benefits.

Smallholder farmers in Madagascar have a variety of traditional strategies for coping with the impacts of extreme weather events such as cyclone, drought, and flooding, but these are insufficient to bring farming families out of poverty and to improve their overall resilience to climate change. Traditional coping strategies for agricultural production loss or food insecurity include consuming less food, switching diets, harvesting wild foods (yams, wild animals) from communal forests to supplement their diets, borrowing money and food from relatives or friends, selling small livestock or working as agricultural wage labourers on other farms to generate income to purchase food (Harvey et al. 2014). These risk coping and management strategies are insufficient for dealing with the expected increases in natural disasters resultant from climate variability and extreme events (Tadross et al. 2008) that will come with climate change. In addition, traditional coping strategies often degrade the remaining communal forests, and negatively impact livelihood in the long-term.

Increasing the productivity and resilience of smallholder farming systems under climate change is a huge challenge that will require significant and sustained technical, financial and political support and action at both the national and local levels.

This project will strengthen the regional, national, and sub-national institutional capacity to identify, prioritize, implement, monitor, and evaluate climate-smart landscapes strategies and measures, as well as renewable energy development, through training workshops followed by field trips, developing training modules and sharing policy briefs.

E.4.2. Financial, economic, social and institutional needs

Madagascar has one of the highest poverty rates in Africa and the world. Madagascar´s Human Development Index (HDI) is ranked as 154 out of 188 countries assessed in 2015 and GDP is 175 out of 188 countries. Average *per capita* income is only US$440 per year[37]. The proportion of the Malagasy population living below the international poverty line increased from 70.9 percent in 2001 to 87.7 percent in 2015, indicating that the burden of poverty that leaves people vulnerable to economic, social, political and environmental shocks is becoming worse. Rural women in particular are highly vulnerable to environmental change as they have even less access to resources and services compared to men, and restricted ability to own and control assets. Additional responsibilities such as care for children and elderly, gathering water and fuelwood, and household agriculture, place further burden on women's ability to adapt and be resilient in the face of climate change or climate disasters.

The population of the CAZ and COFAV landscapes face the same predicament as described in section E.4.1 for smallholder farmers throughout the island. By targeting the most vulnerable households in the landscapes the project aims to lift them out of a situation of dependency so that they are able to improve agricultural production and engage more successfully with markets, including accessing finance such as that provided by the Investment Fund.

[36] https://maplecroft.com/about/news/ccvi_2012.html. Accessed 15 April 2016
[37] http://data.worldbank.org/country/madagascar Accessed 15 April 2016

Although Madagascar regularly experiences extreme weather events, there are no national sources of funding available to address climate hazards, as the country depends heavily on international support, often in the form of emergency appeals. There is not yet any financial mechanism to efficiently address climate risks from better preparation to rehabilitation following natural catastrophes such as cyclones, floods and drought. More generally, the Government of Madagascar has historically depended on external assistance to finance development programs and environmental programs in particular[38].

As already noted in section B3, there is a lack of private sector financing for the types of private sector investments proposed in the Project. During the Project, the Investment Fund will contribute to filling the gap in financial institutions that exist for providing finance for climate resilient sustainable agriculture investments and renewable energy investments. Further details of the Investment Fund are provided in annex 2b.

To address long-term financing needs for activities leading to climate resiliency, the Project will support the creation of a new Climate Change Trust Fund. This Trust Fund is a priority of Madagascar's climate change strategy[39]. The exact governance arrangements for the Trust Fund will be decided during the project (including ensuring that it is gender responsive, meaning that projects that the fund will support must incorporate gender issues) but it is envisaged that it will operate in a similar way to the recently created Trust Fund for Protected Areas and Biodiversity. Further information on the Trust Fund is provided in section C2. It is intended that the Trust Fund would fund both public sector activities and investments in private sector businesses to continue supporting the same types of activities as in the Project.

The Project has been designed with the BNCCC and with the participation of regional authorities with close attention paid to ensuring that government services (both national and regional decentralized ones) play a significant role in supporting the execution of the project. One of the Project outputs is specifically focused on building the capacity of government technical services so that they are able to play this supporting role and continue to lead climate resiliency work in the landscapes beyond the end of the project. The specific needs that are addressed with regards to strengthening institutions and building capacity are:

- Provision of training on climate change through the development of modules for universities, civil society organizations, professionals working on conservation and development issues, regional and local authorities, and community associations. The trainings will be directed towards an equitable number of men and women (with a special emphasis on this at the community level) and will include a specific module on gender as well as weaving gender considerations into all modules;
- Capacity building (training, equipping and financing Project activities) of decentralized government services (agriculture, forestry, water). As much as possible, both male and female extension agents will be trained and all agents will receive training on how to engage with farmers of the opposite sex;
- Working with local primary and secondary school authorities within the landscape to develop and use relevant education materials on climate change that contribute to the national curriculum objectives;
- Support to the BNCCC to play its coordination role in this Project; and,
- Creation, capacity building and capitalization of a Climate Change Trust Fund. In addition to establishing the necessary management systems of the fund, a major objective will be to help the Trust Fund become an accredited Implementing Entity of the GCF.

E.5. Country Ownership

Beneficiary country (ies) ownership of, and capacity to implement, a funded project or programme

E.5.1. Existence of a national climate strategy and coherence with existing plans and policies, including NAMAs, NAPAs and NAPs

As noted in Section C1, the Project is well aligned with, and makes a significant contribution to addressing national priorities as set out in key policy and strategic documents, including those related to climate change. A summary of relevant policies is provided here with further details given in Annex 2a.

Madagascar's Intended Nationally Determined Contributions (INDCs)

Madagascar's INDCs give balanced weight to both adaptation and mitigation activities. Madagascar's INDCs were prepared taking into account the *Politique Générale de l'Etat* (PGE), the *Politique Nationale de Développement* (PND) and drew heavily on the *Politique Nationale de Lutte ontre les Changements Climatiques* (PNLCC). The proposed project contributes to many of the objectives set out as INDCS. Mitigation measures of relevance to the Project are:

[38] World Bank 2013. Madagascar Country Environmental Analysis
[39] Government of Madagascar 2010. Politique Nationale de Lutte contre les Changements Climatiques/PNLCC

- Facilitate access to energy, stabilize/strengthen existing energy sources and develop new sources, notably from renewable and alternative sources:
  - Land Use, Land-Use Change and Forestry (LULUCF)
  - Agriculture including promotion of conservation agriculture and climate-smart agriculture techniques.

The overall mitigation impact of these contributions is expected to reduce GHG emissions by 30 $MtCO_2eq$ by 2030 compared to the baseline scenario. Note that the proposed Project is expected to reduce GHG emissions by 10 $MtCO_2eq$ with respect to the baseline scenarios of the targeted landscapes and it will therefore make a major contribution (30 percent) towards achieving Madagascar's INDC mitigation target.

Adaptation priorities identified in the INDCs and that form part of the proposed Project are:

- Integration of climate change in all key development reference documents (nationally, regionally, locally);
- Awareness raising campaigns on the damaging effects of climate change and degradation of the environment;
- Development of climate-smart agriculture pilot initiatives that are integrated models of resilient agriculture;
- Promotion of improved rice production techniques such as the System of Rice Intensification/Improved Rice System (*SRI/SRA)* and improved techniques for rain-fed rice;
- Restoration of natural forest and improved connectivity between habitats; and,
- Identification and sustainable management of climate refuge areas inside and outside protected areas.

The impacts that the INDC adaptation measures are expected to deliver by 2020 are:

- A reduction to level 4 of the index for loss of human life due to cyclones;
- Improved food security and an increase in the number of people saved from famine;
- Reduced rate of erosion of coastal zones; and,
- Restoration of 35,000 hectares of primary forest and mangroves.

Other key government climate change policy documents that the Project is aligned with are:

- The National Action Programme for Adaptation (*Programme d'Action National d'Adaptation CC/ PANA* (2007));
- The National Policy for Action on Climate Change (*Politique Nationale de Lutte contre les CC/PNLCCC (2010*));
- The list of Nationally Appropriate Mitigation Actions/NAMAs published in 2010;
- The National Adaptation Plan (*Plan National d'Adaptation*) that is currently being developed.
- The General Policy of the State (*Politique Générale de l'État/PGE* (May 2014)) and the National Development Plan (*Plan National de Développement PND*) for the period 2015 to 2019;
- Social Protection Policy (*Politique Nationale de Protection Sociale* (2015)) and the National Strategy for Social Protection (*Stratégie Nationale de Protection Sociale/SNPS (2016-2025)*) ;
- National Plan for the Promotion on Gender (*Plan National pour la Promotion du Genre*/PANAGED (2003);
- The Sectoral Policy, Program and National Plan for Agriculture, Livestock and Fisheries (*Lettre de Politique Sectorielle Agriculture Elevage Pêche (LPAEP) et Programme sectoriel Agriculture, Elevage Pêche Plan National d'Investissement Agricole 2016-2020 PSAEP/PNIA*); and,
- The National Environment Policy and the Water Code.

Further details of the contributions of the project are provided in the ESMP in Annex 6 and are summarised in the table below.

Table 1: Summary showing how the Project Outcomes are aligned with, and contribute to, key national policies and strategies.

Project outcomes	Key relevant national policies and strategy documents								
	PANA	PNLCCC	INDCs	REDD+	PGE	PND	SNPS	PANAGED	PSAEP
Strengthened adaptive capacity and reduced exposure to climate risks	X	X	X		X	X	X	X	X
Strengthened awareness of climate threats and risk-reduction processes	X	X	X	X	X	X	X	X	X
Strengthened institutional and regulatory systems for climate-responsive planning and development	X	X	X	X	X	X	X	X	X
Increased number of low-emission power suppliers		X	X		X	X		X	
Improved management of land and forest or improved management contributing to emissions reduction		X	X	X	X	X		X	

The National Policy for Action on Climate Change (*Politique de Lutte Contre le Changement Climatique /PNLCC*) includes five *strategic priorities* and the Project contributes to all of these:

- Reinforcing adaptation measures taking account of the real needs of the country (with an emphasis on agriculture, public health, water resources, forestry/biodiversity and coastal zones);
- Implementing mitigation actions that benefit the country, including pursuing opportunities through voluntary carbon markets and the development of a REDD strategy;
- Raising awareness of climate change and integrating it at all levels of decision making;
- Development of sustainable financing solutions including the creation of **National Climate Change Fund**; and,
- The promotion of research, development and transfer of technologies and adaptive management.

The National Adaptation Programme of Action (NAPA)

The National Adaptation Plan (*Plan National d'Adaptation*) is currently being developed under the lead of the BNCCC and CI is contributing to that process. The Project focuses on three sectors of the NAPA: agriculture sector, water resources and forests. The NAPA priority regions include CAZ and COFAV. The Project activities are very well aligned with the national priority interventions and will contribute to six of the 15 national priorities identified in the NAPA (see Table 2).

Table 2. National priorities identified in the National Adaptation Programme of Action and that are included in the project

Rank in NAPA	Priority Adaptation Projects
1	Rehabilitation and/or construction of barrages and protective dams
3	Intensification of agriculture and livestock rearing
4	Adoption of anti-erosive measures through soil restoration/protection techniques and stabilization of sand dunes
8	Tree planting for rural zones with reforestation plans using appropriate, adapted species
9	Promotion of community-forest management (through GELOSE, GCF)
11	Awareness raising of climate change issues through an Information, Education, Communication program

REDD+ Strategy

Madagascar's government has worked to develop a national REDD+ program. Madagascar was one of the first countries to present a Readiness Program Idea Note (R-PIN) to the FCPF in April of 2008. A Readiness Preparation Proposal (R-PP) was developed soon after but was not submitted until 2014 due to the political situation and resulting suspension of non-humanitarian aid by most donors. Madagascar submitted an Early Idea Note to the FCPF and R-PIN in 2014 that was approved in October 2015 and will support further development of the REDD+ strategy.

The three landscape-level forest carbon initiatives developed in Madagascar (CAZ, COFAV and Makira) are among the earliest globally to generate verified emissions reductions and have influenced the efforts to implement REDD+ nationally. The three initiatives have been developed and validated/accredited under the Verified Carbon Standard (VCS) while COFAV and Makira have been accredited under the Climate, Community Biodiversity Standard (CCBS). The CAZ and COFAV initiatives have been developed by the Government of Madagascar's Forestry Department with support from Conservation International while Makira has been developed by Wildlife Conservation Society (WCS). The Government of Madagascar, CI and WCS have been successful in attracting some performance based payments for these activities; however, the relatively low demand for voluntary emissions reductions characterized by a very low "carbon price" have meant that the continuity of these forest conservation activities is currently doubtful unless other sources of funding can be found. In the case of CAZ and COFAV the Project proponents propose that the REDD+ pilot activities leading to emissions reductions are funded directly from a grant from GCF.

The pilot landscape initiatives to reduce emissions from deforestation at CAZ, COFAV and Makira continue to be important for underpinning the development of an informed REDD+ strategy that draws on real field experience. As such the continuation of the CAZ and COFAV avoided deforestation activities as proposed in the Project submitted to GCF will directly benefit and inform the REDD+ strategy development.

E.5.2. Capacity of accredited entities and executing entities to deliver

Conservation International

Addressing the root causes of climate change and adapting to its impacts are essential components of Conservation International's (CI) mission of safeguarding nature for human well-being. CI's vision for climate change work is to realize the full potential of nature, and nature-based solutions, to mitigate, and support people in adapting to, climate change through the protection, restoration, and sustainable management of ecosystems. It's estimated that 700 million people globally are currently vulnerable to the impacts of climate change – 213 million of them residing in countries where CI operates.

CI's mitigation efforts incorporate the conservation and restoration of forest ecosystems, the implementation of climate-smart agriculture and the protection and restoration of coastal ecosystems (blue carbon). CI also supports vulnerable populations' efforts in adapting to climate change via conservation and restoration activities, as well as providing solutions for adaptive and sustainable management of key service-providing ecosystems (i.e. coral reefs, mangroves, and wetlands). CI focuses its efforts on ecosystems that are critical for increasing resilience to the impacts of climate change and maintaining the resources on which communities depend.

CI has worked continuously for more than 24 years in Madagascar protecting the country's biodiversity and empowering the government, civil society groups, and communities to improve the natural resource management. In Madagascar, CI has pioneered efforts to develop a new model of protected areas that engages the communities that use the natural resources in collaborative management arrangements. CI Madagascar has worked with the government to identify priority areas for conservation and to develop new policy and legislation that strengthens the rights of local people and allows civil society to play a more prominent role in managing areas for conservation. CI Madagascar has been a pioneer on much of the climate change work in the country and with its wide range of partners has developed a diverse portfolio of projects, that include: establishing regular national-scale deforestation mapping, natural forest restoration, pilot REDD+ landscape initiatives at CAZ and COFAV, and the first assessment of the impacts of climate change on Madagascar's biodiversity and livelihoods. CI staff are active participants in national technical committees that provide technical advice for national strategy development (including the *Groupe Thématique pour le Changement Climatique*" (GTCC) and national REDD+ committees). In 2004, CI, through the Ecosystem Finance Division (EFD) based in CI's headquarters in the U.S, was one of the founding members of the Madagascar Foundation for Protected Areas and Biodiversity and EFD will support the establishment of the proposed Climate Change Trust Fund.

CI's EFD has invested more than US$450 million in over 80 countries and territories, through various mechanisms and instruments, helping secure the protection of more than 90 million hectares of high-value habitat, including tropical forests, wetlands and coastal and marine ecosystems. EFD has supported over 2,000 partner organizations globally through direct grants and loan financing, and through its investments has leveraged over US$520 million to directly benefit communities and ecosystem services, including more than US$50 million of private-sector investments. The estimated carbon stock of forests that have received CI investments since 2002 was over 14 billion tons of carbon (2014 analysis). Analysis of global water balance models estimate that CI investments have helped secure the flows of more than 390 cubic kilometres of high quality freshwater per year.

CI has created more than 20 Trust Funds in various jurisdictions and leveraged more than US$200 million in public and private sector funding through these innovative mechanisms to ensure long-term financial sustainability of the interventions. Since 2009, CI has also been one of the world's most active investors in land-based mitigation and adaptation projects (REDD+), developing a core portfolio of projects that have attracted over US$30 million in carbon finance and helped protect or restore over a million hectares of critically important land in Latin America, Africa, and Southeast Asia. With over 15 years of experience successfully investing for environmental, social, and financial outcomes in developing economies, CI has learned what is needed to quickly identify and mature opportunities.

As a result of its extensive experience in managing funds and projects, in November 2013 Conservation International became one of the first non-governmental organizations to be accredited as a Project Agency by the Global Environmental Facility.

The European Investment Bank

Created in 1958, the EIB is the largest multilateral capital market borrower and project lender by volume. The EIB is the European Union's bank. It is the only bank owned and representing the interests of the EU Member States and it works closely with other EU institutions to implement EU policy.

It particularly supports the transition to a low-carbon, environmentally friendly and climate-resilient economy, thus promoting environmental goals in both developed and developing countries in order to achieve sustainable development around the world. EIB integrates climate action considerations throughout the methods and processes that it uses to assess and monitor all its investment projects (called "mainstreaming" by EIB).

As one of the largest providers of climate finance worldwide, EIB commits at least 25% of its lending portfolio to operations aimed at mitigating and/or adapting to climate change. In 2015, EIB achieved a ratio of 26.5% corresponding to EUR 20.6 billion.

EIB funds projects especially by acting as a catalyst to mobilise private finance. Its traditional financing products are medium and long-term "senior" loans to public or private counterparts. EIB finances large projects with direct project loans whereas it supports smaller projects indirectly through credit lines to local banks or financial intermediaries. Then EIB complements these "classical" lending instruments with financial products or mechanisms commensurate with the complexity or the innovative features of the project, notably but not limited to private equity fund investments, "subordinated" loans, "securitised" bond structures, multi-instruments or fund of funds "platform" that may benefit first-loss protection from third-party guarantors (especially government or

development aid agencies). Last but not least, under its Climate Awareness Bond (CAB) programme, the EIB is the largest multilateral institution issuer of green/climate bonds with nearly EUR 13 billion since 2007 (with a record EUR 4 billion in 2015).

As of end 2015, the EIB is invested in 37 private equity infrastructure funds (the category to which the Althelia Investment Portfolio belongs) with EUR 1.3 billion commitment out of EUR 13.7 billion total capital for these funds. These funds are providing equity to projects in the sectors of renewable energy, energy efficiency, transport and social infrastructure, afforestation-reforestation-forest management-REDD+, and urban and rural land decontamination/rehabilitation/regeneration.

To monitor and report on the execution of the private sector activities executed by the Althelia Investment Fund, the EIB will refer to its "Equity Risk Guidelines" that deal respectively with: a) the risk issues and related risk mitigating measures associated with direct and indirect equity investments irrespective of their geographical focus and origin of funds; b) the appraisal and due diligence process to be followed within EIB, involving various front-office, back-office, risk management, technical and economic, finance and financial control, legal and compliance departments; and c) the key credit aspects to be considered when entering into/structuring such transactions. These guidelines also refer to other monitoring and procedure documents regarding financial monitoring, physical monitoring, representation on external governance bodies, conflicts of interest, operations manual and valuation.

For each project or investment fund, the "Project Directorate" of the EIB that is made of scientists, engineers, economists, environmentalists and social specialists, imposes standards (particularly in terms of ESG), supervises their implementation and monitors the achievements of technical, environmental and social objectives and/or the compliance to ESG guidelines.

The EIB is one of the Althelia Climate Fund cornerstone investors and was material in the establishment of its investment strategy and business model and also in the elaboration of its ESG Guidelines.

Regarding EIB's presence in Madagascar, the EIB has lent since 1970, EUR 440 million to the Government of Madagascar and to various public and private enterprises. The largest loan was EUR 260 million for the Ambatovy Nickel project, one of the largest nickel mines worldwide. Most recent loans went to the national energy and water company, for the renovation of the railway infrastructure, to private aquaculture projects and in the form of credit lines to microfinance institutions. In the past, the Bank was rather supportive to the textile industry and small mining projects. For the years to come, the Bank is intending to support more road renovations that are crucial for the country's economic and social development.

BNCCC

The BNCCC has an experienced technical and financial team that have developed and are currently managing three large projects that have benefited from UNFCCC financial mechanisms. One of BNCCC's roles in the Project will be to ensure synergies with existing climate change projects where possible. The three projects are:

- A US$4.7 million project through the UNEP Adaptation Fund entitled "Promoting Climate Resilience on Rice Sector through Pilot Project in the Alaotra Mangoro Region" (2012-2017). This is an integrated pilot initiative that will serve as a model for rice cultivating practices in Madagascar and elsewhere. This includes watershed management through an extensive reforestation programme, water quality and soil controls, adapted varieties, crop rotation, agroforestry, climate risk management; and involve numerous public and private stakeholders at central and regional levels, as well as local communities, associations, and cooperatives.
- A US$5.3 million project from UNEP/GEF Least Developed Countries Fund entitled "Adapting coastal zone management regarding ecosystems and livelihoods" (2014-2019). This project aims to strengthen the adaptive capacities of both natural ecosystems and local communities' livelihoods in the four most vulnerable coastal regions of Madagascar. Activities include mangrove restoration, diversification of revenue generating activities, and public health monitoring.
- A US$6 million project through UNDP/GEFLeast Developed Countries Fund entitled, "Enhancing the adaptation capacities and resilience to climate change in rural communities in Analamanga, Atsinanana, Androy, Anosy and Atsimo Andrefana in Madagascar" (2016-2021). This project concerns four of the six most climate vulnerable sectors in Madagascar (water, coastal zones, agriculture, forestry and biodiversity) and activities to strengthen resiliency are being implemented in five national priority administrative regions as identified in the country's NAPA.

Althelia

Althelia Climate Fund GP **SARL** and Ecosphere Capital Partners have a proven track record in designing and executing the Althelia Climate Fund, and deploying finances from that fund to projects across Latin America and Africa. The Althelia Climate Fund successfully raised over US$114 million from a range of public and private sector investors including the EIB.

This experience means that the governance and financial structures proposed have all been 'road tested' and found to be fit-for purpose, ready to be improved and tailored to the Madagascan context.

Ecosphere Capital Partners (advisors to the Althelia Climate Fund) have an established team of investment, technical, operational and ESG expertise based in their London office. This team and their operational procedures can be quickly utilized for the Fund proposed here, bolstered by in-country supported and expertise from Ecosphere Madagascar.

Althelia have demonstrated an ability to source, structure and execute innovative and impactful deals in the field of sustainable land use. This includes deals such at the multiple award winning[40] Tambopata cocoa and conservation project in the Peruvian

[40] https://althelia.com/2015/10/27/momentum-for-change-awards-althelia-ecospheres-deforestation-free-cocoa-project-in-peru/

Amazon that works with both a local NGO and the national government through the Peruvian National Parks Authority and the Caribbean Coast Forest Corridor project in Guatemala that takes a landscape scale approach to livelihoods and conservation by developing a REDD+ project alongside investments in agroforestry and eco-tourism.

Althelia has a long history of cooperation with the two accredited entities, Conservation International and the EIB. CI was a founding member of Althelia and continues to be a member of the Expert Board of the Althelia Climate Fund, where it works closely with the Fund Manager to advise on potential investments. EIB is a cornerstone investor of the Althelia Climate Fund and is a member of its Advisory Board.

Althelia will have a team of 5 to 7 dedicated staff based in Madagascar, supported by the existing personnel in London, to implement and monitor investments in Madagascar. The Althelia local team will interact closely with the CI local team in order to benefit from their long local presence and experience.

E.5.3. Engagement with NDAs, civil society organizations and other relevant stakeholders

In Madagascar the GCF is represented by a Focal Point who is also the Director of Madagascar's Climate Change Coordination Office (BNCCC). The Focal Point and BNCCC team has been fully involved in the development of this proposal and the BNCCC will be a co-executing entity in the project (see section C7). Detailed information on meetings between BNCCC and Conservation International and Althelia Ecosphere for the preparation of this proposal are provided in annex 12a. A member of staff from the GCF Secretariat also participated during project design meetings in Antananarivo during the week starting Feb 15, 2016 to support the National Focal Point and advise on GCF's various requirements (e.g. fiduciary, etc.) and investment criteria. In addition, two meetings have been organised with other relevant ministries to ensure coherence with sectoral policies and strategies and that the project is designed to incorporate synergies with other donor and government programs. Key meetings with government ministries/departments/regional authorities and other key stakeholders include:

- 13-14 November 2015: Planning workshop with CI and BNCCC to design the public sector interventions of the project;
- 17 November 2015: Presentation of initial project concept and logical framework and work plan to partner ministries (Ministries of Water, Agriculture, Population, Education, Health, Energy, Decentralization) for feedback;
- 24-27 November 2015: Regional consultations in CAZ (organized in Toamasina and Moramanga) and COFAV (organized in Ranomafana and Ambalavao) with regional, municipal (commune) authorities, decentralized government services, civil society groups, community forestry associations, representatives from identified vulnerable groups, representatives from women's groups, representatives from other civil society groups and research institutions. More detail is provided below;
- December 2015 –January 2016: Various meetings between CI, Althelia Ecosphere, EIB and BNCCC to refine project design taking into account stakeholder feedback;
- 15 Feb 2016: Workshop with CI, EIB, Althelia, BNCCC and GCF Secretariat to assess progress and address outstanding project design questions;
- 16 Feb-31 March 2016: Various meetings between CI Madagascar and BNCCC to detail work plan, staffing needs, budget etc.; and,
- 24 March: Presentation to Ministry coordination focal points for final feedback.

In addition to the meetings with the BNCCC and relevant ministries at the national level, four regional stakeholder meetings (two in CAZ and two in COFAV) were organized and feedback elicited. The objective of the regional meetings was to present the project concept and logical framework and to provide an opportunity for the stakeholders to participate in the project design. Stakeholders at the meetings included regional and municipal authorities, representatives from local communities, women's groups, decentralized government technical services (e.g. forestry, agriculture), local NGOs and civil society groups. A total of 188 people (32% women) participated in the regional meetings.

The consultation meetings were organised as follows:

- Presentation of information on the project including expected outcomes, outputs, and intervention strategies;
- Invitation to provide comments and discuss the proposed project;
- Presentation of the process for developing the full proposal, the different phases and the submission calendar; and,
- Identification of responsibilities of stakeholders and capacity building needs of regional actors linked to executing the project and for ensuring long-term sustainability.

Following the regional consultation meetings, information on the proposed project was provided in Malagasy in each of the municipality offices along with a book to collect suggestions and comments from local people. The comments and suggestion books were collected after six weeks (approximately the 15 January or thereafter for certain communes). A total of 2101 comments were received from 857 people (of which 20% were women, 90% were from individuals or representatives of civil society organisations and 10% were from regional governments/municipalities). All the comments received were generally supportive of the project objectives; most of the comments provided specific suggestions for priority needs of particular villages. A detailed analysis of the comments received is included in annex 12a.

For project activities such as investments that still need to be identified, a similar engagement process described above will be utilized and at a minimum will include a clearly defined Stakeholder Map and Stakeholder Engagement Plan. All investments will comply with Althelia ESG standards, which are including IFC Performance Standards; for avoidance of doubt, should any project affect indigenous peoples' access to land or resources – which is not envisioned- then Free and Prior Informed Consent (FPIC) will be required under PS7. CI has a very robust Rights-based Approach that respects indigenous peoples and their rights and will be utilized throughout the life of this Project.

E.6. Efficiency and Effectiveness

Economic and, if appropriate, financial soundness of the project/programme

E.6.1. Cost-effectiveness and efficiency

Adequacy of financing structure

The funding requested for the Project is a combination of equity participation and grant and although the Project is ambitious, this financial structure is adequate and reasonable to achieve the project goal. The **public sector activities** target some of the most vulnerable people in the world to climate change risks and institutional stakeholders with extremely low capacity, which makes it particularly difficult to address many of their needs through other financial instruments. There is very little public funding available for the types of public sector activities proposed and where it does exist (or if it becomes available during the Project lifetime) the Project will work towards ensuring complementarity.

The funding requested for the **Investment Fund** could have been structured as a loan, but by structuring as equity participation, the returns to the Investment Fund can be recycled to the Climate Change Trust Fund along with a share of the profit to ensure the long-term sustainability of the interventions. Additionally, the structure of the project has been designed to crowd-in private investment by tackling barriers to investment through the enabling conditions component and attracting significant levels of co-financing through the Investment Fund. As discussed above, in section B, Madagascar is perceived as a high-risk country by most of the institutional and private investors (see Doing Business ranking in section B4 and C1), and therefore attracting private capital in the country for innovative financing is very challenging and would require significant expectation of profit to mitigate the perceived risk, such high profitability being incompatible with the targeted beneficiaries. Without the participation of the GCF as a key investor in the Investment Fund, it would be impossible to raise further private funds for climate-related investment in Madagascar.

Efficiency and effectiveness

The Project is cost effective because it uses and strengthens existing institutions (e.g. local decentralised government services) and existing structures (e.g. community associations). Not only will this approach reduce costs during Project execution, but it will also result in improved capacity for future adaptation and mitigation action.

Cost efficiency is also achieved because the Project is building on the long-term presence of CI in Madagascar and on previous work that CI has done. As a result, the **public sector activities** are able to build on a strong foundation and exist on highly experienced staff and an organisational structure that does not need to be created from scratch. This is reflected in the low overall coordination and monitoring costs for the Project, which are only approximately 6.4% based on GCF's contribution to the Project budget.

The engagement of the **private sector** in this Project also adds to its cost effectiveness. For example, the calculation in E.6.5 shows that over the life of the Project the expected cost per tCO_2eq will be negative. In other words, a small profit will be generated at the same time as reducing GHG emissions. This is due to the profitability that is expected in the base case for the Investment Fund.

E.6.2. Co-financing, leveraging and mobilized long-term investments (mitigation only)

The overall amount of co-financing for the project is US$16.3 million and US$53.5 million is requested from GCF, equating to a co-financing ratio of 3:10.

Co-financing source and amount

Source	Amount US$M
EIB Green/Climate Bond	10
EIB ACP SFF	5
Althelia	0.5
CI	0.8
TOTAL	16.3

In addition to the direct co-financing, the Investment Fund will leverage debt that contributes directly to achieving the renewable energy outcome of the Project. Based on an estimated 4:1 equity to debt ratio for renewable energy investments (with the Investment Fund providing the equity), a further US$56M could be invested by debt providers.

With a total of US$72.3 million of co-financing / leveraged funding, the GCF contribution leverage would reach a ratio of 13:10.

E.6.3. Financial viability

Financial sustainability beyond the life of the Project has been an over-riding consideration during the Project design. Many of the public sector activities (e.g. agricultural extension services, capacity building and education) are public good in nature and will not themselves generate revenues to allow continuity. Nevertheless, they are designed in a way to maximize sustainability, for example by anchoring them within existing institutions (notably decentralised government services) so that they are not entirely dependent on Project support.

The sustainable agriculture activities are expected to be self-sustaining (see financial models in Annexe 3a and further discussion in section F1) from the perspective of the beneficiary communities. The illustrative example indicates five-year internal rate of return of 64%, however we note sizeable sensitivities to returns with changes to sales income (price and volume risk) and costs. Noting the time-lag between production and sale and the lack of formal market mechanisms to support prices, both input and sale, this further highlights income insecurity and risks.

With regards to both agricultural activities and the Investment Fund, without the support of the GCF it would not be possible to raise the necessary scale of finance into given their risk-reward profile.

A sensitivity analysis of the Investment Fund has been conducted based on varying project costs and revenues (see more granular detail in annex 3b). The table below shows the results of this analysis. It can be seen that there is some margin for under-performance whilst maintaining profitability. It should be noted that the GCF's participation as a B shareholder (junior) in the Investment Fund is fundamental to attracting the other investments.

In $USM	Low Case	**Base case**	High case
Performance	80%	100%	120%
Amount Committed	$50.50	$50.50	$50.50
Profits	$1.09	$13.99	$26.89
Trust Fund	$35.76	$44.70	$53.64
IRR	1%	8%	14%

It is expected that the Investment Fund will return the invested capital and a profit of US$13.99 million, or a total return of US$64.49 million net of fees (or an annualised 8% return). Please note that the expected level of profitability is lower than expected rates of return usually sought for investments in developing or emerging countries that typically range between 15% and 25%. There are two main reasons for the lower than average return: (1) the Investment Fund prioritises environmental (climate change, conservation) and social impacts over profitability and therefore aims at distributing a larger-than-usual portion of the value creation to local stakeholders (communities involved in the sustainable agriculture production, NGOs involved in conservation, etc.); and (2) although the targeted activities by the Investment Fund will generate significant measurable long-term emission reductions, those will not be sold to voluntary or compliance markets, excluding thus a source of revenues for the Investment Fund that would have topped-up profitability.

The creation of a Climate Change Trust Fund that can continue to fund both public sector "not-for profit" and private sector "for profit" activities is an important part of the strategy for ensuring financial viability after the project. The Trust Fund will be capitalised with the GCF's initial capital and the profit gained on it (subject to development of a new proposal that will be submitted to GCF), thereby allowing for further investments in low carbon activities beyond the life of the Project.

Finally, it is expected that the Investment Fund will pave the way for other investment vehicles in Madagascar, allowing for more replication of the investment approach beyond the GCF intervention.

E.6.4. Application of best practices

The Project will use best practice standards whenever possible.

CI has successfully implemented climate change mitigation and adaptation projects around the world and will draw on a broad network of experts to advise on the design of activities.

The EIB is an EU Body that applies a first class range of policies and standards regarding its operations and relations with stakeholders. These policies and standards are reviewed and updated periodically and are illustrative of how the Bank seeks to fulfil its mission in an open, transparent and responsible way.

In particular, best practices can be highlighted for:

- The Sustainable Agriculture activities will draw on research conducted within Madagascar on conservation agriculture and climate-smart techniques as well as on the local expertise of members of the *Groupement Semis Direct de Madagascar* (GSDM) Network who have extensively piloted sustainable agriculture techniques (see annex 2a for further details);

- The REDD+ pilots in CAZ and COFAV have been designed and validated to conform to the Verified Carbon Standard and Climate, Community Biodiversity Standard (COFAV was accredited as a "gold" CCBS project, the highest possible standard);
- CI is an active member of the Conservation Finance Alliance that has developed best practice guidelines on environmental trust funds. CI's Ecosystem Finance Division has also supported the creation of over 20 Trust funds (including one in Madagascar) and will bring this experience to support the creation of the new Climate Change Trust Fund;
- The EIB makes available the list (non-exhaustive) of its most relevant policy documents and guidelines: the EIB Group Institutional Governance, the Codes of Conduct, the Transparency and Corporate responsibility Policy, the Bank's Accountability Policy and Mechanisms, the EIB's Anti-Fraud Policy, the EIB Compliance Policy Framework (including the Anti-Money laundering and Combating Financing of Terrorism), Data Protection Policy, the Project-Cycle (i.e. appraisal and results measurement), various Thematic/Sector Lending Polices (especially on energy, environment, climate and water), Geographic Policies (especially the EIB external mandates by the EU Member States), the EIB Guide to Procurement and the multiple cooperation agreements with third parties especially with other international organisations.
- The EIB Environmental and Social Principles and Standards (ESPS) outline the standards that EIB requires of the projects that it finances, and the responsibilities of the various parties. It provides a much greater sense of urgency about the problems of climate change, gives greater recognition to the importance of biodiversity, and, expands the section on the social dimensions of sustainable development.
- The EIB Statement on Climate Action which presents the EIB's objectives and approaches in support of EU leadership on climate issues. The Statement guides EIB activities and outlines the standards that EIB requires of the projects that it finances to promote sustainable development. In practice, climate consideration is in everything the EIB does especially by fostering innovations, pioneering innovative finance mechanisms, building resilient infrastructure, safeguarding vulnerable regions, partnering with a wide range of stakeholders, catalysing private investment and underscoring the SDGs.
- The Madagascar Climate Bond is part of the EIB's well established Climate Awareness Bond program;
- All the Althelia Investment Fund's investments will undergo a technical due diligence by the Fund Advisors to determine that the best and most locally appropriate practices and technologies are being employed. In particular, this will focus on the long-term sustainability of any technology in the face of climate change and the capacity of the local population to manage it;
- Althelia's ESG Standard requires the application of international best practices wherever possible, for example by using internationally recognized certifications for commodities such as Fair Trade and Soil Association Organic. Althelia ensures that their ESG guidelines comply with best practices for policies such as grievance mechanisms, reporting and monitoring, and they review their guidelines regularly to ensure we remain in line with current best practices. They also ensure their projects have all relevant best practices for health & safety policies and Standard Operating Procedures in place; and,
- The Monitoring and Evaluation activities will employ recent advances in mobile information technology[41] to speed up field based data collection, input it remotely to centralized databases and automate analysis, allowing Project decision makers to review monitoring data rapidly.
- The EIB components (Investment Fund and Green Bond issuance) will comply with EIB policies and procedures. The CI components will be covered by CI policies and procedures.

E.6.5. Key efficiency and effectiveness indicators

	Estimated cost per t CO_2 eq, defined as total investment cost / expected lifetime emission reductions (mitigation only)	
GCF core indicators	(a) Total project financing	US$56,832,249
	(b) Requested GCF amount	US$40,682,249
	(c) Expected lifetime emission reductions overtime	10M tCO_2eq
	(d) Estimated cost per tCO_2eq (d = a / c)	**US$5.68 / tCO_2eq**
	(e) Estimated GCF cost per tCO_2eq removed (e = b / c)	**US$4.07 / tCO_2eq**

[41] https//:datawinners.com

The analysis above was calculated based only on the financing that will contribute to the activities designed to generate mitigation impacts. These are sustainable agriculture activities that will address both adaptation and mitigation (output 1.6), the activities to provide access to renewable energy (outcome 4) and the activities to improve forest management (outcome 5). Half of the public sector project management costs have been assumed to be related to mitigation.

The sources for the estimation of expected lifetime emissions reductions are explained in section E.1.2 and detailed calculations are provided and in annexes 2a and 3b.

These calculations do not include the profits that are expected from the Investment Fund and destined for the Madagascar Climate Change Trust Fund. Once these are added to the calculation, the overall cost of a tCO_2eq generated by the project will change radically from GCF's perspective:

GCF financing for mitigation over project: (GCF Commitment – Returns for Trust Fund) = $40.7M– $44.7M = -$4.0M

Therefore, for each tCO_2eq of emissions avoided, a small profit (of US$0.40) will be made. Furthermore, these calculations take no account of further mitigation impacts that may be achieved through future investments of the Climate Change Trust Fund in which GCF's original investment and any profits attributable to it will be ultimately placed (subject to future approval of a new proposal).

It is hard to find similar projects with which to compare that simultaneously address reductions in emissions from energy sources and reducing deforestation; however, the cost per tCO_2eq compare favourably to REDD+ initiative projects and also to the typical cost paid for emissions reductions on the voluntary market. For example Ecosystem Marketplace's tracking of carbon prices indicates that since their records began the average price per tCO_2eq is approximately US$5.80[42]. In Q4 2015, the average spot bid price for REDD tCO_2eq was US$5.25 and the average offer price was US$6.00[43].

Clearly the project provides excellent value for money once it is considered that it is expected to generate overall profits while also generating considerable emissions reductions equivalent to 30% of the country's INDC target.

Expected volume of finance to be leveraged by the proposed project/programme and as a result of the Fund's financing, disaggregated by public and private sources (mitigation only)

GCF contribution to mitigation activities: US$40.7 million

Public sector co-finance: US$0.8 million

Private sector co-finance: US$15.5 million

Overall the co-financing is 28% of the overall costs of activities leading to mitigation impacts.

Other relevant indicators (e.g. estimated cost per co-benefit generated as a result of the project/programme)

Costs per co-benefits are estimated as follows (see section H for impact indicators and assumptions):

Indicator	Target	Total cost of associated activities (US$M)	Cost (US$)
Beneficiaries	562,000	69.8	$124/beneficiary
Vulnerable people more resilient/food secure	85,700	7.5	$87/person
Jobs created	28,300	50.5	$1,784/job
MW of generation	33	24	0.73M/MW
People with access to low emission energy source	448,000	24	$54/person

[42] Ecosystem Marketplace 2015. Ahead of the Curve: State of the Voluntary Carbon Markets 2015. 51pp.
[43] Thomson Reuters 2015. Q4 2015 REDD Price Report

**** The information can be drawn from the project/programme appraisal document.***

F.1. Economic and Financial Analysis

Due to the public good nature of many of the Project's outputs, a financial analysis of the overall project is not deemed pertinent. The financial analysis is therefore focused on the two areas of the project that do include revenue generation:

- The expected performance of the Investment Fund;
- The Public sector-financed sustainable agriculture activities that are not expected to be revenue generating for the Project itself but are intended to be profitable and self-sustaining for the participating smallholder farmer communities.

Detailed financial models are provided for these two areas in Annexes 3a and 3b and key illustrative outputs of these models are presented briefly in this section.

The Investment Fund

The Investment Fund will be a closed-ended fund classified as Luxembourg SICAV-SIF or *société d'investissement à capital variable – fonds d'investissement spécialisé* (investment company with variable capital – specialised investment fund), governed by the Luxembourg 2007 Act. The Fund is formed as a SCA or *société en commandite par actions* (corporate partnership limited by shares), managed by its General Partner, Althelia Climate Fund General Partner (GP) which is an AIFM-registered (Alternative Investment Fund Manager) as per EU regulations on fund management.

The rules governing the Fund will be formalised in its Articles of Incorporation (AoI) under the laws of Luxembourg and the CSSF-supervised ("*Commission de Surveillance du Secteur Financier*") Private Placement Memorandum or PPM. Both the Fund and the GP are approved by and registered with the CSSF which is the Luxembourg financial authority.

The Fund will be open to the following qualified investors:

(1) EIB, in its capacity as administrator of GCF's Proceeds and Accredited Entity of the GCF, with a Total Expected Commitment amount of up to USD 35.0 million;
(2) The EIB, as mandate manager for the Africa-Caribbean-Pacific Smallholder Financing Facility ("ACP SFF"), with a Total Expected Commitment amount of USD 5.0 million;
(3) The EIB up-fronting through a Special Purpose Vehicle ("SPV")with a Total Expected Commitment amount of up to USD 10 million ("Bondholder Capital Contribution") related to a portion of coupon payments in respect of the Bond's Benchmark Rate "foregone" by investors from a successful issuance of a bond (the "Bond") to bondholders (the "Bondholders"). The Bond will be issued under the CAB;
(4) International public investors (e.g., agency aid, OECD governments) ("International Public Investors") and international private impact investors (e.g., foundations and family offices) ("International Private Investors") (collectively, the "International Investors");
(5) Local Madagascar-based investors ("Local Investors"); and
(6) The Investment Fund manager, in its capacity as GP, with a fixed total commitment amount of USD 0.5 million, to be fully paid in cash.

The expected commitments from the Class A Shareholders and Class B Shareholders is described in the chart below, subject to changes in the Target Size approved by the Advisory Board after the First Closing:

Class of Shares	Investors	Target Size	First Closing	Final Closing
A shares	Bondholders	Up to USD 10 million	Up to USD 5 million (but not less than USD 4 million)	Up to USD 5 million (to be adjusted based on the subscription of A shares by Local Investor(s)/International Private Investor(s))
A shares	Local Investor(s) / International Private Investor(s)	To be determined	N/A (but not more than USD 1 million)	To be determined
	Sub total (A shares)	USD 10 million	USD 5 million	USD 5 million

B shares	EIB, as administrator of GCF Proceeds and Accredited Entity of the GCF	Up to USD 35 million	USD 17.5 million	Up to USD 17.5 million (to be adjusted based on the subscription of B shares by International Public Investor(s))
B shares	EIB, as mandate manager of the ACP-SFF	USD 5 million	USD 2.5 million	USD 2.5 million
B shares	Investment Fund manager	USD 0.5 million	USD 0.25 million	USD 0.25 million
B shares	International Public Investor(s)	To be determined	N/A	To be determined
	Sub total (B shares)	USD 40.5 million	USD 20.25 million	Up to USD 20.25 million
Total	**(A shares + B shares)**	USD 50.5 million	USD 25.25 million	Up to USD 25.25 million

- "Class A Shareholders" will be the EIB Bondholders and Local Investor(s) and International Private Investors (if any);

- "Class B Shareholders" will be EIB, as administrator of GCF's Proceeds and Accredited Entity of the GCF, EIB, as the mandate manager for the ACP SFF and the International Public Investors, if any.
- "Total Expected Commitment": for the cases of the investors described in paragraphs above, it shall mean the fixed or estimated commitment amount that each will invest at the First Closing and Final Closing as described in the chart above.

The subscription of shares of the Investment Fund by the investors shall happen on two closing dates:
(i) The first closing on 1 January 2017 or on the date of execution of the relevant Share Subscription Agreements by at least the investors described above as (1), (2), (3) and (6), whichever is later ("First Closing Date"), and
(ii) the second closing on a date that falls no later than one year after the First Closing Date, in accordance with the CSSF rules, or such other date that may be determined by the Advisory Board, in which all the investors shall sign the relevant Share Subscription Agreements ("Final Closing Date").

The following shall apply in relation to the Investment Fund:

- Class A Shareholders and Class B Shareholders will subscribe shares of the Investment Fund proportionately in accordance with the chart above on two closings;
- The First Closing shall require (1) an aggregate commitment of up to USD 5 million from EIB Bondholders but not less than USD 4 million if other Class A Shareholders subscribe, and (2) an aggregate commitment of USD 20.25 million from specific Class B Shareholders, namely, EIB acting as administrator of GCF Proceeds and Accredited Entity of the GCF, EIB acting as the mandate manager for ACP SFF and the Investment Fund manager;
- The Final Closing shall require (1) an aggregate commitment of up to USD 10 million from the Class A Shareholders, of which at least one Local Investor is required to participate as a Class A Shareholder, and (2) an aggregate commitment of up to USD 40.5 million by Class B Shareholders or such lower amount that may be agreed by the Advisory Board of the Investment Fund (the "**Advisory Board**").
    - In case International Private Investor(s) and Local Investor(s) participate in the First or the Final Closing as Class A Shareholders, the Total Expected Commitment Amount of EIB Bondholders shall be reduced accordingly.
    - In case International Public Investor(s) participate in the Final Closing as Class B Shareholders, the Total Expected commitment Amount of EIB acting as administrator of GCF Proceeds and Accredited Entity of the GCF and EIB acting as the mandate manager for ACP SFF for the Final Closing shall be reduced proportionally accordingly.
    - The Advisory Board will approve the participation of any local and international private investors that subscribe shares at First and Second Closings Date;

- For avoidance of doubt the proportion of the commitments and disbursements between: (i) Class A Shareholders, and (ii) Class B Shareholders, must remain in the ratio of 10:40.5 at all times during the life of the Investment Fund.

- In case the Class A Shareholders do not achieve the expected investment amount of USD 10 million by the Final Closing, then the Advisory Board may agree to reduce the Target Size of the Investment Fund and shall do so proportionally between the commitments of the Class A Shareholders and Class B Shareholders, in order to maintain the above mentioned ratio among them.

The capital of the Investment Fund will be composed of 3 classes of shares:

- A shares: retained by EIB Bondholders, and eventually International Private Investors and Local Investors, which will be entitled to a senior return commensurate with the protection of their committed capital by Class B shares under the waterfall;
- B shares: representing (1) the GCF contribution through the EIB, as the administrator of GCF Proceeds and Accredited Entity of the GCF, under the form of equity participation; (2) the ACP SFF contribution through the EIB, as the mandate manager of the ACP SFF; under the form of a loan (3) the Investment Fund manager contribution under the form of equity, and (4) eventually the contribution from other potential international public investors; given that all these contributions assume *pari passu* (among themselves) the potential capital losses incurred by the Investment Fund; and
- C shares: held by the Investment Fund manager which will be entitled to returns, if applicable.

The Investment Fund manager as Class B Shareholder will be excluded from specific votes (like removal of GP, key person events, change of control of GP) that will be described in the PPM. Class C shares does not have voting rights.

Return of funds by the Investment Fund to investors will be made in accordance with the following waterfall:

- Firstly, on a (quarterly) (semi-annual or annual) basis to all the Class A shareholders proportionally: (1) to the Bondholders, a distribution to allow the repayment of the Bondholder's Capital Contribution (i.e. payment of the "Bond's Benchmark Rate" in their quality of investors in an EIB bond), and (2) to other Class A Shareholders the repayment of their nominal contribution;
- Secondly, on a (quarterly) (semi-annual or annual) basis to the B shareholders in order to allow serving an appropriate (1) contractual interest rate to the ACP SFF (channelled through EIB), and (2) a dividend to the GCF (channelled through EIB), the Investment Fund manager and other Class B Shareholders if any;
- Thirdly, to Class B shareholders until they have recovered their nominal contribution (i.e. pari passu either if under the form of loan or equity);
- Fourthly, to all Investors (i.e. A and B shares only) on a pari passu basis until they have received the Fund's Hurdle Rate;
- Lastly, if any, 80% of profit (see below) to all Investors (A and B shares) on a pari passu basis and the remaining 20% to the Fund Manager (C shares).

With respect to payment to the investors, the Investment Fund documentation will :

- explicitly state that for the B shareholders, the payments of interest rate for loans and payment of dividends for B sharesholders are pari passu (i.e. same % amount) at any distribution event whatever the amount made available for payment; and
- also contain a clause explicitly indicating that in case the Fund is unable to distribute the contractual interest rate for the loans and the proportional amount as dividends for the equity investment to the Class B shareholders at one point in time, the following sequence of events takes place: (a) after taking account of the priority payment for the Class A shareholders, the Fund Manager proposes to the Advisory Board of the Fund the level of distribution that can be made available pari passu to the B shareholders; (b) GCF will be consulted by EIB on the proposal; and (c) the Advisory Board shall agree on the proposed amount..

The Investment Fund will issue distribution notices to all shareholders on a (quarterly) (semi-annual or annual) basis, to be netted off with the drawdown notices if applicable.

The ***"Bond's Benchmark Rate"*** is the rate agreed by Bondholders to enter into the Bond, likely the bond yield of an EIB standard issuance rate for the same term at (and to be known at) the time of the bond issuance.

"Profit" results from excess of financial performance above the Hurdle Rate.

The emission reductions credits, with a value of c. USD 50m are the sole and only property of the GCF i.e. the other investors have no claim on either the carbon credits or their market value as part of the above-described waterfall and profit sharing mechanisms.

The following table (Base Case scenario) provides an overview of the projected finances of the Investment Fund..

All investors, Class A and Class B, will be disbursing funds to the Investment Fund on a pro rata basis, i.e. in the proportion of their capital commitment.

Base Case Scenario

1. Summary Financials

Performance Assumption

100% Performance (rev vs baseline)

Investor Summary Table

	Capital Commited	Capital Disbursed	Capital Returned	Revenues	To Trust Fund
A Shares	$ 10.00	$ 10.00	$ 10.00	$ 2.77	
Contribution from Bondholders	*$ 10.00*	*$ 10.00*	*$ 10.00*	*$ 2.77*	
B Shares	$ 40.50	$ 40.50	$ 40.50	$ 11.22	
EIB managed ACP SFF	*$ 5.00*	*$ 5.00*	*$ 5.00*	*$ 1.39*	
Fund manager direct investment	*$ 0.50*	*$ 0.50*	*$ 0.50*	*$ 0.14*	
GCF	***$ 35.00***	***$ 35.00***	***$ 35.00***	***$ 9.70***	$ 44.70
Total	$ 50.50	$ 50.50	$ 50.50	$ 13.99	$ 44.70

Summary of three scenarios

in USDm	Low case	Base case	High case
Performance	80%	100%	120%
Amount Committed	$ 50.50	$ 50.50	$ 50.50
Profits	$ 1.09	$ 13.99	$ 26.89
Trust Fund	$ 35.76	$ 44.70	$ 52.90
IRR	1%	8%	14%

2. Investor Model

This section models the cashflows for invesvtors into the Investment Fund, the Madagascar Climate Change Trust and the EIB Bond.

Investment Fund Portfolio Model

Assumptions

Fund structure	Amount	CCY	%Amount	Seniority	% in the tranche
Contribution from Bondholders	10.00	USDm	19.8%	A	100.00%
GCF	35.00	USDm	69.3%	B	86.42%
EIB managed ACP SFF	5.00	USDm	9.9%	B	12.35%
Fund Manager direct investment	0.50	USDm	1.0%	B	1.23%
Total	**50.50**	**USDm**			80.2%

Investment Fund cashflows (USDm)

	2017 FY1	2018 FY2	2019 FY3	2020 FY4	2021 FY5	2022 FY6	2023 FY7	2024 FY8	2025 FY9	2026 FY10	TV	Total
Disbursement to activities and mgt fee	(6.51)	(8.11)	(9.84)	(7.41)	(3.95)	(3.50)	(3.59)	(3.15)	(2.56)	(1.88)	-	**(50.50)**
disbursement by A shareholders	*(1.29)*	*(1.61)*	*(1.95)*	*(1.47)*	*(0.78)*	*(0.69)*	*(0.71)*	*(0.62)*	*(0.51)*	*(0.37)*	-	*(10.00)*
disbursement by B shareholders	*(5.22)*	*(6.50)*	*(7.89)*	*(5.94)*	*(3.17)*	*(2.81)*	*(2.88)*	*(2.53)*	*(2.05)*	*(1.51)*	-	*(40.50)*
inc. disbursement by GCF	*(4.51)*	*(5.62)*	*(6.82)*	*(5.13)*	*(2.74)*	*(2.43)*	*(2.49)*	*(2.18)*	*(1.77)*	*(1.30)*	-	*(35.00)*
Returns from activities	0.04	1.28	2.97	5.09	6.49	6.93	7.70	8.52	9.55	9.94	5.99	**64.49**
Total cashflows for fund (USDm)	(6.47)	(6.83)	(6.88)	(2.32)	2.54	3.43	4.11	5.37	6.99	8.06	5.99	**13.99**
Waterfall	0.04	1.28	2.97	5.09	6.49	6.93	7.70	8.52	9.55	9.94	5.99	**64.49**
to A shareholders (up to called capital)	0.04	1.28	2.97	5.09	0.63	-	-	-	-	-	-	**10.00**
to B shareholders (up to called capital)		-	-	-	5.86	6.93	7.70	8.52	9.55	1.94	-	**40.50**
to EIB managed ACP SFF	-	-	-	-	*0.72*	*0.86*	*0.95*	*1.05*	*1.18*	*0.24*	-	*5.00*
to Fund Manager	-	-	-	-	*0.07*	*0.09*	*0.10*	*0.11*	*0.12*	*0.02*	-	*0.50*
to GCF	-	-	-	-	*5.07*	*5.99*	*6.66*	*7.36*	*8.25*	*1.68*	-	*35.00*
net revenue to A shareholders	-	-	-	-	-	-	-	-	-	1.58	1.19	**2.77**
net revenue to B shareholders	-	-	-	-	-	-	-	-	-	6.41	4.80	**11.22**
to EIB managed ACP SFF	-	-	-	-	-	-	-	-	-	*0.79*	*0.59*	*1.39*
to Fund Manager	-	-	-	-	-	-	-	-	-	*0.08*	*0.06*	*0.14*
to GCF	-	-	-	-	-	-	-	-	-	*5.54*	*4.15*	*9.70*
												-
Inflows to Mada CC Trust (GCF share of B flows)	-	-	-	-	5.07	5.99	6.66	7.36	8.25	7.22	4.15	**44.70**

3. Portfolio Model

This section provides a summary of the fund's financials at the portfolio level.
The Fund Cashflow model takes the example deals presented on the following tabs and scales them according to the total investment size of the portfolio deals.

Fund assumptions

Available for Fund	50.5 USDm
Management fees	2% of AUM
Set up costs	0.45 USDm
Annual costs	0.25 USDm

Fund Disbursments (USDm)

	FY Commitmer	Committed	2017 FY1	2018 FY2	2019 FY3	2020 FY4	2021 FY5	2022 FY6	2023 FY7	2024 FY8	2025 FY9	2026 FY10	TV	
Total cashflows														
Total Disbursments		-	(6.51)	(8.11)	(9.84)	(7.41)	(3.95)	(3.50)	(3.59)	(3.15)	(2.56)	(1.88)	-	(50.50)
Total returns from activities		37.45	0.04	1.28	2.97	5.09	6.49	6.93	7.70	8.52	9.55	9.94	5.99	64.49
TOTAL CASHFLOWS			**(6.47)**	**(6.83)**	**(6.88)**	**(2.32)**	**2.54**	**3.43**	**4.11**	**5.37**	**6.99**	**8.06**	**5.99**	**13.99**
		IRR		8%										
		multiple		1.28							NB: TV is expected final CF x	40%		

Additional information on the Investment Fund (cf. Annex 2a – Investment Fund Design and Annex 5bTermSheet)

Target Investments:

Investment will target activities which can have a direct and measurable impact on conservation and climate, namely:

- *sustainable agriculture activities* (e.g. zero-deforestation cocoa, sustainable vanilla, etc.), for which the Investment Fund will finance and help implementation of good agricultural practices (both in terms of techniques and organisation), certification of production (organic, fair trade, zero deforestation) and route to market;
- access to clean and sustainable energy, being clean cooking (for instance non-charcoal bio-energy cook stoves) or electricity (for instance renewable energy, mostly decentralised, especially solar and small hydro) for which the Fund will finance and help implementation of activities that can help local people to get a better and healthier access to energy whilst reducing pressure on forest, often exposed to risk of charcoal; for avoidance of doubt, Althelia is not implementing as project developer these renewable energy projects but is co-financing them: names and track record of selected and potential project developers are available on demand; internally, Althelia has a dedicated highly qualified staff that will assess the financial and technical feasibility of the energy investments.
- The target allocation of funds is 50% to sustainable agriculture and 50% to access to energy.

Eligibility Criteria of projects

If the Fund Manager was to identify two investment opportunities with similar expected return and assuming that only one of these (for instance for concentration reasons) could be completed, the following criteria would apply, by order of importance:

- Firstly, Climate mitigation impact (tCO2 per $ invested)
- Then, Climate adaptation impact (qualitative assessment)
- Then, Conservation impact (hectares of high conservation value forests, value of fauna and flora…)
- Then, Social impact (job creation, access to energy…)

Thus eligible investments will be screened against 5 impact criteria: climate change mitigation, climate change adaptation, area/land under sustainable management, MW renewable energy/energy provided to households, jobs.

Final beneficiaries

Final beneficiaries of the investments will be community or farmer organisations (especially those called COBAs or Communautés de Base in Madagascar), NGOs and private companies. The Fund will not finance public institutions. Households will be beneficiaries from improved revenues or livelihood from agriculture and from access to rural energy / electricity.

Investment Processes and Instruments

The objective of the Fund is to invest into a portfolio of 10 to 15 activities.

Individual investments will be in the range of US$2m to US$5m, mainly in the form of medium-term loans (5 to 7 years profit participation loan - PPL) although equity participation might be considered in some exceptional occasions, targeting a reasonable net return in the range of 5% to 10% per annum.

Investment period is 4 years from first closing date with 1 year extension upon approval of the investors

Concentration limits

The following rules apply but they can be amended on a case by case basis with an approval from the Fund's Advisory Board

- No more than 60% of the Fund size into sustainable agroforestry investments;
- No more than 50% of the Fund in global renewable energy investments with (a) no more than 30% of the Fund size into rural renewable energy (electricity) investments; and (b) no more than 30% of the Fund size into renewable energy "cooking/heating" investments;
- No more than 10% of the Fund size into a single investment
- No more than 20% of the Fund size into a global investee.

Governance Structure

The Fund will be governed by three bodies:

- *The Expert Board (EB)* which is to be consulted by and give expert's advice to the General Partner on new areas/projects to invest in and on specific topics, and to provide industry insight and industry trends /projects as well; the EB will take no part in the management or control of the business or affairs of the Fund but
- *The Investment Committee (IC)* whose role is the taking of investment decisions; the IC is comprised of 3 members including an independent member which must participate in any IC meeting; one IC member must have a relevant experience in investment in sustainable energy projects; all resolutions taken by the IC will be by a vote of a majority provided that no decision – including those for which the EB has provided advice - can be taken unless the independent member votes in favour of the resolution; and,
- *The Advisory Board (AB)* which provides a forum where the General Partner may discuss potential or actual conflicts of interest as well as adjustment to the Fund's legal documentation (e.g. extension of Investment Period or amendment of investment guidelines etc.); the AB also does semi-annual reviews of portfolio performance and adherence to the investment guidelines; the AB will be composed of no less than 3 members [appointed respectively by CI and EIB plus at least one representative of the Bondholders].

The above governance structure allows all investors to effectively oversee the proper management of the Fund by the Fund Manager without being formally in control and hence liable.

The articles of the Fund will include a standard provision for removing the Fund Manager with the approval of the majority of Investors.

The articles of the Fund will also include provisions on key persons and consequences on the functioning of the Fund under critical circumstances in term of staffing.

Reporting

There will be an annual audited reporting for the period 01 January to 31 December starting the first closing date of the Investment Fund and ending 31 December of the year of the Fund's liquidation.

The annual audited statements (made by the auditor appointed by Althelia) are made under Luxembourg GAAP with annual fiscal year ending 31 December.

Conclusion: rationale for involving the GCF in the structure for Madagascar

As stated in section D1, Madagascar is perceived as a high-risk country by most of the institutional and private investors (please see Doing Business ranking in section B4 and C1), and therefore attracting private capital into the country for innovative financing is very challenging and would require significant expectation of profit to mitigate the perceived risk, such high profitability being incompatible with the targeted beneficiaries. Without the participation of the GCF as a key investor in the Investment Fund, it would be impossible to raise further private funds for climate-related investment in Madagascar.

Public Sector-Financed Sustainable Agriculture Activities

The Project acknowledges challenges faced by rural agricultural communities in Madagascar to self-finance or access funds for key agricultural inputs such as resilient seed and fertilizer. As described in section C1, many smallholder farmers are typically self-reliant and face extreme vulnerability to climate risks due to food and income security.

At the community level, the Project will support agricultural investment with the aim of creating a sustainable financing cycle within a short term period, two to three years. Indicative rates of return are 64% on a five-year time horizon, although we acknowledge inherent income and cost risks due to underlying market and climatic conditions. The summary below shows an illustrative example of US$15,000 investment directed to agricultural input costs. Support is modelled over the initial two-year period, while the economic benefits are long term as the project becomes self-financing.

Cashflow analysis	Year										
	0	1	2	3	4	5	6	7	8	9	10
CI Funds for Direct Costs and Capital	-9,794	-5,206	0	0	0	0	0	0	0	0	0
CI Technical Assistance	-1,959	-1,041	0	0	0	0	0	0	0	0	0
Incremental Sales		19,192	22,171	25,561	29,414	31,473	33,677	36,034	38,556	41,255	44,143
Incremental Direct Costs and Capital*	0	-5,352	-11,381	-12,269	-13,226	-14,258	-15,370	-16,569	-17,861	-19,254	-20,756
Incremental Labour Costs		-2,369	-2,535	-2,713	-2,902	-3,106	-3,323	-3,556	-3,805	-4,071	-4,356
Net cashflow	**-11,753**	**5,224**	**8,255**	**10,579**	**13,286**	**14,110**	**14,984**	**15,909**	**16,891**	**17,930**	**19,031**
* Not covered by CI support											
Discount factor	1.000	0.833	0.694	0.579	0.482	0.402	0.335	0.279	0.233	0.194	0.162
20%											
Discounted cashflow	**-11,753**	**4,353**	**5,732**	**6,122**	**6,407**	**5,670**	**5,018**	**4,440**	**3,928**	**3,475**	**3,074**
Net present value 5 years	**16,532**										
Net present value 10 years	**36,467**										
Internal rate of return - 10 years	**72%**										
Internal rate of return - 5 years	**64%**										

For the purposes of financial analysis, fund disbursements from CI Madagascar are reflected as front-ended costs covering the first two years of the project and costs of technical assistance, although not borne by communities, are included for completeness. Labour is also included even though it may not be remunerated directly through wages, as the economic benefit will be received by participating smallholder families through sharing of incremental profits.

The model provides a Sustainability Metric, calculated as a factor of the cash position at the end of the period compared to the cash need for direct costs in the following year. As indicated below, the grant-financed contributions from CI Madagascar in the first two years, coupled with positive contributions from reinvestment in subsequent years allow this metric to grow indicating the ability to finance the following year's direct costs.

Community cashflows	Year 1	Year 2	Year 3	Year 4	Year 5
CI funds for Direct Costs and Capital	9,794	5,206	0	0	0
Incremental Sales	19,192	22,171	25,561	29,414	31,473
Own Consumption	-1,919	-2,217	-2,556	-2,941	-3,147
Incremental Direct Costs	-9,794	-10,558	-11,381	-12,269	-13,226
Incremental Capital Costs	0	0	0	0	0
Incremental Labour Costs	-2,369	-2,535	-2,713	-2,902	-3,106
Net cashflow	**14,904**	**12,067**	**8,911**	**11,301**	**11,994**
Opening cash	0	14,904	26,971	35,881	47,182
Closing cash position	**14,904**	**26,971**	**35,881**	**47,182**	**59,177**
Sustainability metric	**1.41x**	**2.37x**	**2.92x**	**3.57x**	**4.15x**
Closing cash/next year direct costs					

Rural communities exhibit high levels of subsistence farming, as such the illustrative base case reflects a share of incremental production to be destined to improve health and nutrition – here set at 10%. Over and above this, additional production is expected to be sold or if consumed locally reducing the need to buy-in food to meet nutritional needs. Either way, the additional production provides a net positive economic benefit.

The table below indicates the sensitivity of returns to changes in sales income and costs. While the IRR is relatively high at 64% on a 5-year basis, we highlight significant downside risk from cost and sales pressures, not uncommon in these environments. This

further underlines the inherent risks facing smallholder farmers and indicates the need for grant-based support as well as mechanisms to provide stable and affordable inputs and support for sales prices.

IRR - sensitivity to changes in sales and costs

% change in Costs \ % change in Sales	-25%	-20%	-15%	-10%	-5%	0%
25%	-29.4%	-13.5%	-1.3%	9.2%	18.7%	27.5%
20%	-19.0%	-5.3%	6.0%	16.1%	25.4%	34.1%
15%	-9.9%	2.5%	13.3%	23.1%	32.3%	41.0%
10%	-1.5%	10.2%	20.6%	30.2%	39.4%	48.1%
5%	6.7%	17.8%	28.0%	37.6%	46.8%	55.7%
0%	14.8%	25.6%	35.7%	45.3%	54.6%	63.6%

F.2. Technical Evaluation

Annexes 2a and 2b provide detail on the technical (and financial) feasibility of the proposed interventions. The technical feasibility of each component is summarised below.

Summary of the technical feasibility of the outcomes

Outcome	Technical Feasibility
Strengthened adaptive capacity and reduced exposure to climate risks	The individual techniques proposed as climate-smart sustainable agriculture measures have been well researched in Madagascar and there is an active network of knowledgeable practitioners, for example in the "*Groupement Semis Direct de Madagascar*". The innovative aspect of this project will be to combine the various techniques at scale to improve resiliency across entire landscapes.
Strengthened awareness of climate threats and risk-reduction processes	The executing entities have excellent capacity on executing awareness raising activities within Madagascar and can mobilise existing networks of partner organisations, educators, journalists and training professionals. CI will draw on its national and international experience of developing high quality awareness raising materials related to climate threats and risks reduction.
Strengthened institutional and regulatory systems for climate-responsive planning and development	The CI Madagascar and BNCCC teams have extensive experience of capacity building and will draw upon additional expertise in partner organisations and on existing networks of educators and training professionals to develop and deliver high quality trainings. The most complex of the activities will be the establishment of a new Climate Change Trust Fund, but the Foundation for Protected Areas and Biodiversity created in 2005 provides a recent successful model and staff from both CI Madagascar and BNCCC are very familiar with that foundation having served as either its staff or board members.
Increased number of low-emission power suppliers	A portfolio of potential sub-projects that are national priorities has been identified with agencies of the Government of Madagascar, including the National Agency for Rural Electrification (ADER). Specific feasibility studies will be needed for each of these sub-projects as part of the due diligence process of the Investment Fund.
Improved management of land and forest or improved management contributing to emissions reduction	Feasibility has already been demonstrated for both CAZ and COFAV projects through third-party technical assessments of the REDD+ activities as described in the avoided deforestation Project Description documents. Regarding emissions reductions projections and general feasibility of activities both projects have been validated to the Verified Carbon Standard (CI, 2013 a,b). The COFAV project has also been validated for the Climate, Community, Biodiversity Standard (CCBS) (CI, 2013 c).

F.3. Environmental, Social Assessment, including Gender Considerations

The environmental and social standards of the Project will be governed by the GCF's Performance Standards (currently GCF is adopting the IFC Performance Standards (PS)[44]), CI's Environmental and Social Management Framework for GCF funded projects[45] and the EIB Environmental and Social Principles and Standards (ESPS)[46] that contains the EIB Environmental and Social Handbook. These documents have all been developed to prevent, minimize and mitigate any harm to the environment and to people by incorporating environmental and social concerns as an intrinsic part throughout the project cycle. Any identified adverse environmental and social impacts will be addressed and tracked throughout all stages of the project cycle to ensure that supported activities comply with the policies and practices laid out in these guiding policies and standards. In general, these policies are well aligned and the Project will follow the principle of applying the most stringent of the standards that applies. The national legislation on Environmental and Social impacts is also well aligned with the GCF/IFC PS, EIB's ESPS and CI's ESMF.

In July 2015 the GCF accreditation panel concluded that CI fully meets the requirements of the Fund's interim Environmental and Social Safeguards (ESS) in relation to minimal to no E&S risk Category C/I-3.4. It also stated, however, that "the applicant demonstrates a greater degree of ESMS maturity than is required by the Fund's interim ESS for Category C/I-3 against which the applicant is seeking accreditation." Some of the public sector activities in this proposed project require accreditation for E&S risk Category B and CI applied to GCF for Category B status in January 2016. The EIB has been accredited for all E&S risk categories, including A.

For this project, CI and EIB have prepared the overall Environmental and Social Management Plan (ESMP) for the project (annex 6), but recognize that once chosen, some potential Project activities/sub-projects that are not yet defined in detail (e.g. investments through the Investment Fund) may need specific Environmental Impact Assessments to conform to national requirements, GCF/IFC PS, EIB's ESPS or CI's ESMF standards (and also Althelia's own Environmental, Social and Governance standards). As outlined in the ESMP, all Project activities/sub-projects will adhere to the GCF/IFC PS; the private sector activities will also adhere to EIB's ESPS and the public sector activities will adhere to CI's ESMF. The ESMP outlines the relevant E&S assessment and monitoring standards that will apply for the Project activities.

The ESMP includes a screening of Project activities (including potential activities) in relation to the GCF/IFC PS and overall the project conforms to GCF risk level B. In summary, the Project activities will produce certain minor impacts or low risk social and environmental impacts for the majority of the proposed activities and some potential medium social and environmental risks for activities that are either small scale or can be addressed with appropriate mitigation measures during Project execution.

Potential Impacts of the Project

The accredited entities will ensure that assessments of any subprojects are undertaken in compliance with the CI ESMF standards and EIB ESPS. Particularly, EIB has the capacity to analyse and mitigate those risks appropriately and in line with its accreditation.

The negative impacts of the Project will be potentially associated with sustainable agriculture activities (both public and private sector activities), revenue generating activities for vulnerable households, forest restoration, drinking water provision and the Investment Fund's renewable energy investments. Relevant mitigation measures have been identified in the ESMP following a hierarchy of "avoid, minimize and mitigate".

The most significant potential negative impacts are: i) pollution of watercourses due to inappropriate or incorrect use of fertilizer and pesticides related to agricultural intensification activities; ii) overexploitation of forest resources and loss of biodiversity linked to community forest management activities; iii) conflicts over land or water that arise as a consequence of activities to improve agricultural production; and iv) increased risk of water borne diseases related to activities intended to improve water management.

For outcome A7.0 (adaptation through sustainable agriculture) and M9.0 (mitigation through forest conservation) of the Project, the potential negative impacts can be avoided, minimized or mitigated through measures already planned in the project, the integration of environmental and social clauses in procurement procedures and contracting, and by following best practices for sustainable agriculture techniques.

For negative impacts linked to outcome M6.0 (renewable energy), screening will be undertaken for each potential investment and next steps will be determined based on the national legislation (and taking into account EIB and GCF/IFC requirements) and the process for determining whether a full environmental and social impact assessment is needed. Individual ESMPs will be developed for all investments requiring them under national legislation, EIB ESPS and/or CI's ESMF.

Gender integration

This Project has the potential to significantly improve both male and female smallholder farmers' capacity to adapt and respond to climate change and support their families to be more resilient to economic changes; however, it also has the potential to perpetuate unequal or negative gender norms and responsibilities, with female beneficiaries (both farmers and family members) continuing to be the most vulnerable with little benefit from this Project.

[44] http://www.ifc.org/wps/wcm/connect/115482804a0255db96fbffd1a5d13d27/PS_English_2012_Full-Document.pdf?MOD=AJPERES
[45] http://www.conservation.org/publications/Documents/CI-GEF-Environmental-and-Social-Management-Framework-(ESMF).pdf
[46] http://www.eib.org/infocentre/publications/all/environmental-and-social-principles-and-standards.htm

In order to ensure the former, the Project will conduct a thorough gender analysis within the first quarter to refine and strengthen the gender mainstreaming and action plan provided as annex16. The plan will contain specific background information, activities, modes of project implementation, and M&E methods that will ensure that the project is responding to the needs and interests of both male and female farmers and their families. The project lead will be responsible for ensuring that the gender analysis and plan are conducted on-time, by staff or consultant who has the relevant skills, and will be responsible for ensuring that the recommendations in the mainstreaming plan are fully embedded into the Project workplan (including M&E and the budget). The analysis and action plan will identify the following:

- Background information about how men and women are involved in activities that this project seeks to impact (e.g. small holder agriculture, marketing of products, etc.), including their participation in relevant decision-making structures;
- How men and women may be positively or negatively impacted by the project;
- The differing needs and priorities of men and women vis-à-vis the project, and development of specific activities (e.g. agricultural activities) that respond to those different needs;
- How profits from this project (through improved agricultural practices and marketing) will be used to improve nutrition and human wellbeing of participating families;
- How men and women may be impacted differently by climate change and the reasons for their different vulnerabilities to climate change;
- The barriers & challenges that may keep women (or men) from fully participating in project activities, including stakeholder consultations;
- Culturally-appropriate and relevant methods to reduce or eliminate those barriers or challenges;
- Whether specific training or capacity building (and what kind) is needed to ensure full and equitable engagement of women (or other particularly vulnerable groups) in the project;
- How best to communicate with men and women (given that illiteracy rates are higher for women); and,
- Relevant indicators for tracking men's and women's participation and benefit sharing.

The Project includes various specific activities to support women's associations or activities in which women are greatly involved (e.g. market gardening, transformation and commercialization of agricultural products, conservation) and from which they derive their principal incomes. Through the capacity building activities the project also aims to improve the representation of women in decision making (e.g. by increasing the number and capacity of women serving on community forest management committees, ensuring their participation in local and regional development planning). Training activities will be organized in such a way as to encourage participation by women, for example by choosing appropriate times and being sensitive to child care needs.

For communication and awareness raising messages particular care will be taken to develop messaging that both men and women are likely to receive, taking into account different sources of information that men and women use and emphasising the use of non-written communications such as radio, community meetings and picture-based communications to overcome the high illiteracy rates.

For monitoring and evaluation activities, indicators will be sex-disaggregated. As an impact investor, the Investment Fund will specifically require investees to monitor and report regarding their impact, including specific metrics related to inclusiveness (one of Althelia's seven impact focal areas). The Inclusiveness impact area includes metrics on gender equality and equity, which the Fund is committed to promoting and forms a key element of all projects.

F.4. Financial Management and Procurement

The financial management and procurement of this project will be governed:

- For the public sector activities and the creation and operationalization of the Trust Fund by CI's financial rules and regulations upon which CI was accredited as an accredited entity of the GCF; and,
- For the private sector activities, by the relevant EIB financial and procurement rules and documents that have been provided to GCF for its accreditation process.

Conservation International

Due diligence: As a US-based organisation, CI is required by the US government and other public donors to perform a Security Screening of all partners, grantees, consultants, vendors, and employees against various lists of organizations and individuals suspected of having links to terrorism. Should a match be made, linking the project partner to known terrorists or money launderers, the CI will not move forward with the project.

Prior to implementation, CI will conduct a capacity assessment of the Executing Entities to ensure the Executing Entities have the financial, operational, administrative and technical capacity to successfully implement the project. Any deficiencies resulting from the assessment will be reported to and monitored by the Project Steering Committee until resolved.

Procurement: All Executing Entities must meet the minimum standards outlined in CI's GCF Procurement Guidelines which can be found here: http://www.conservation.org/projects/Pages/green-climate-fund-agency.aspx CI Madagascar will undertake all procurement for the public sector activities. A procurement plan for the project is submitted as Annex 15.

Accounting and Auditing Standards: US Generally Accepted Accounting Principles and US Generally Accepted Auditing Standards (GAAS) will be applied to the Project.

Banking Arrangements: CI will receive cash advances from the GCF as per the approved disbursement plan in CI's operating bank accountat Bank of America in the U.S., CI's institutional banker. Donor funds are considered operating funds and therefore invested in the most conservative vehicles. Funds will be transferred from CI operating account in the US to CI Madagascar and external grantees on a regular basis (monthly / quarterly depending of the terms of the agreements)based on projected expenditures.

Disbursements: CI utilizes an Enterprise Resource Planning tool called Unit4 Business World (formerly Agresso) to monitor and trace the use of funds. Funding will be disbursed to external partners on a quarterly basis based on cash flow projections submitted to CI on a semi-annual basis. The Executing Entities will report back expenditure via a financial report on a quarterly basis to CI.

Audits: The Project will be audited in accordance with CI's policies and procedures on audits, informed by and together with any specific requirements agreed in the AMA currently being negotiated with the GCF. CI will appoint independent auditors to perform annual financial audits of the project.

European Investment Bank

Due diligence: The EIB "project cycle" could be found at : http://www.eib.org/projects/cycle/index.htm; for the Investment Fund, the EIB will specifically assume its supervisory and monitoring role vis-à-vis the execution of the private investments by the Investment Fund by referring to the Bank's Equity Risk Guidelines which respectively address the fund manager capability, the relevancy and solidity of the fund structure, the fund governance, the quality of the co-investors, the EIB involvement in the governance of the Fund, the leverage policy and effectivity, the exit strategy, the expected returns, the currency risks, the performance distribution policy and the reporting requirements..

Procurement: The EIB Procurement Policy could be found on http://www.eib.org/projects/cycle/procurement/index.htm. No procurement is planned for the private sector activities.

Accounting and Auditing Standards: The Investment Fund will use market standard accounting requirements agreed in the legal documentation (e.g. IFRS, US GAAP, EU GAAP or UK GAAP. Valuations according to EVCA or equivalent). The bond issuance would be audited as part of EIB's normal business procedures, which were described during the accreditation process.

Banking Arrangements: Any GCF funds received by the EIB not invested would either be held by the EIB treasury on behalf of the GCF or by a deposit bank approved to hold deposits on behalf of the EIB.

Disbursements: With regards disbursements, the EIB has detailed guidelines and procedure manuals, but also strong IT capabilities commensurate with its high amount and diversified loan/equity operations (more than EUR 70 billion per year, for its disbursement processing.

Audits: The Investment Fund will be audited in accordance with EIB's policies and procedures on audits, informed by and together with any specific requirements agreed in the AMA currently being negotiated with the GCF. The EIB, in its quality of GCF accredited entity but also as a member of the Fund's Advisory Board, will provide a non-objection on the independent auditors selected by the Fund manager.

G.1. Risk Assessment Summary

The following factors could pose risks to the community and climate change adaptation benefits of the project, and have been considered in the design and implementation of the project:

- **Financial risk**: By definition an investment fund deals in financial risk. The types of investment being undertaken are themselves classed as high risk. This risk is compounded by country level challenges associated with political instability and ease of doing business. By combining the GCF equity participation with private sector finance, the fund's financial structure has been designed with exactly these risks in mind. At an operational level, the focus of the management team will be in minimizing risks, through thorough due diligence of deals and pro-active deal management so that the fund has the greatest possible chance of success.
- **Technical risk**: There is the risk that across the Project the techniques and technology adopted could fail to perform to expectations, reducing impact and/or profitability.
- **Operations and Execution risk:** Operating projects and businesses in Madagascar is challenging, not least due to a lack of capacity. All the executing entities are experienced at operating either in Madagascar or in other similarly challenging countries.
- **Social and Environmental risk**: There is also a medium risk of negative social and environmental outcomes associated with this Project. Generally, the activities and investments are designed to have overwhelmingly positive environmental and social impacts. However diligent application of robust Environmental and Social Standards will ensure that the risk of unintended negative impacts are identified and mitigated.
- **Legal risk:** Although clear legislation exists and the judicial system is independent, the legal system has a reputation for being slow and complex, which creates potential risks for the Project.
- **Political risk**: Madagascar has a long history of political "crises" that have impacted the country's economy, its people and donor programs.

G.2. Risk Factors and Mitigation Measures

Please describe financial, technical and operational, social and environmental and other risks that might prevent the project/programme objectives from being achieved. Also describe the proposed risk mitigation measures.

Selected Risk Factor 1 – Financial risk

Description	Risk category	Level of impact	Probability of risk occurring
By definition an Investment Fund faces financial risk. The reason GCF funding has been sought to build this structure is that the risk-to-reward ratio is not sufficient to attract mainstream commercial finance into sustainable enterprises in Madagascar. Specific financial performance risks include: financial underperformance of investments, commodity price fluctuations, foreign exchange rate fluctuations, and general illiquidity within Madagascar due to poorly developed financial markets.	Financial	Medium	High

Mitigation Measure(s)

The financial risks associated with a fund of this nature should be understood by any investor. The GCF finance will allow Althelia to structure a fund that significantly reduces the risk of fund underperformance from the perspective of the private sector investors and achieve investment where it would not be possible otherwise. Minimizing the financial risk of the Fund's performance is the primary role of the fund manager. All investment decisions and management processes will be geared towards minimizing the risk of losses. Specific mitigation measures include appropriate deal structuring and rigorous due diligence procedures, strong contractual rights, diversification within the investment portfolio, specialist foreign exchange management and hedging built into deals and the application of suitable illiquidity discounts. Further discussion of risks related to the Investment Fund are provided in annex 2b.

Selected Risk Factor 2 – Technical risk			
Description	Risk category	Level of impact	Probability of risk occurring
The Project includes five diverse outcomes and therefore a wide variety of activities. There is inevitably a risk that the techniques and technology adopted could fail to perform to expectations, reducing impact and/or profitability. For example, sustainable agriculture is by design intended to reduce risks, but a wide variety of factors affect agricultural productivity and crops are at risk to pests, diseases and the extreme climatic risks. Similarly there are technological risks with renewable energy and renewable technologies and although they are well tested globally, they are relatively new to Madagascar.	Technical and Operational	Medium	Medium
Mitigation Measure(s)			
These risks will be mitigated, firstly by in-depth technical due diligences performed as part of the Project planning and investment decision processes. It will focus on both the techniques and technology itself and the capacity of Project staff, partners, investees to operate it based on their experience and skills. Where necessary, external expertise will be used and can be built into any financing deal. The Project will target technologies or methods that have been proven at least at small scales and are looking to achieve scale. By diversifying across agricultural systems and renewable technologies the risks associated with very poor performance of a particular approach are reduced.			
Selected Risk Factor 3 – Operational risk			
Description	Risk category	Level of impact	Probability of risk occurring
Madagascar ranks 177 out of 189 in the World Bank's Ease of Doing Business Rankings, is therefore a difficult place to undertake businesses and every stage of business development should be expected to be challenging.	Technical and Operational	High	High
Mitigation Measure(s)			
CI, through its office in Madagascar, has over 24 years of work in the country and has developed the operational procedures, network of partners and necessary capacity to operate successfully. The Investment Fund will be established with a blend of international and local expertise to ensure that best practices in operations can be tailored to the realities of Madagascar. A clear understanding of the challenges will allow time and resource budgets to be designed appropriately and expectations of stakeholders be well managed. The long tenure of the Investment Fund (10 years) is designed to give flexibility should delays be encountered.			
Selected Risk Factor 4 – Social and Environmental risk			
Description	Risk category	Level of impact	Probability of risk occurring
Generally, the Social and Environmental risk of the Project is classified as "category B" as described in section F3; however, the possibility of unforeseen social and environmental risks cannot be disregarded and may be discovered during project execution. This is particularly the case for the Investment Fund's investments because the portfolio of investments is not yet fixed. Risks could include: disputes over land tenure, creation of perverse incentives for	Social and Environmental	Medium	Low

deforestation, environmental impacts of small scale infrastructure for renewable energy or access to resources by local people.			
Mitigation Measure(s)			
A number of potential impacts and mitigation measures have been described in the Project's Environmental and Social Management plan (see annex 6) which will guide the Project's environmental and social performance work. With regards to sub-projects into which the Investment Fund could invest, the fund will screen and perform due diligence prior to investing to ensure compliance with EIB's ESPS that are the basis for GCF accreditation.			
Selected Risk Factor 5 –Legal risk			
Description	Risk category	Level of impact	Probability of risk occurring
Madagascar's legal system and its provisions contain protections for private property rights and a code of commerce; however, the legal system has a reputation for being slow and complex thereby creating legal risks for the Project, notably for the Investment Fund. Specific risks include corruption[47] and enforceability[48] of contracts.	Other	Medium	Medium
Mitigation Measure(s)			
As noted above, CI has operated successfully for over 24 years in Madagascar and has rigorous procedures in place to comply with all aspects of Malagasy legislation. To mitigate legal risks, the Investment Fund will rely on its experienced outside counsel with whom it has a longstanding relationship. This will involve using sub-contracted local law firms to advise on specific Malagasy issues. This counsel will be involved in all aspects of the Investment Fund's structuring as well as individual deals so that they are designed in a way that minimizes risk.			
Selected Risk Factor 6 - Political			
Description	Risk category	Level of impact	Probability of risk occurring
Madagascar has a recent history of political instability with 2001-2002 and 2009-2014 being characterised as periods of "political crisis". Future political turbulence cannot be ruled out and such periods have been characterised in the past by international donors suspending funding, reduced investor confidence, a lack of government strategic direction and impunity with regards to natural resource exploitation.	Other	Medium	High
Mitigation Measure(s)			
During previous "political crises" official government policies and strategies with regards to agriculture, forest conservation and climate change have remained remarkably consistent. Given the broad support for issues addressed by this Project (i.e. sustainable agriculture, reducing climate risks, forest conservation through community forest management, improving access to renewable energy, increasing investment) within civil society and across the political spectrum, the Project is likely to enjoy political support irrespective of any regime change. Nevertheless, the Project will be designed to be as legally robust as possible should dramatic regime changes occur. Political risk insurance will be explored for the Investment Fund.			
Other Potential Risks in the Horizon			

[47] Corruption levels are high, in 2014 Madagascar ranked 133 out of 175 in Transparency International's Corruptions Perceptions Index.
[48] Madagascar ranks 153/189 in the World Bank's Ease of Doing Business Index with respect to contract enforceability

In addition to the risk factors identified above, two underlying threats that the project is trying to mitigate against themselves exacerbate the Project risks:

- **Land/population pressure**: The existing levels of poverty in the Project zone, the increasing population, and the shortage of productive land available to local subsistence farmers all present possible risks to this project. These issues are key drivers of deforestation and will remain a threat to the improved forest management outcome. To mitigate this risk, the Project has been designed with a strong participatory forest management approach through which local communities are fully involved in managing and protecting CAZ and COFAV themselves. An important part of the project design has been to formalize local people's rights of access to the forest by establishing sustainable use zones. This ensures that local people have access to necessary forest products (within agreed limits) and gives them more of a stake in protecting the forest from outside interests. In addition, CAZ and COFAV are protected areas and this provides the legal basis necessary to enforce regulations banning deforestation and mining in the project area.
- **Natural catastrophes**: As described in section C, the project area is threatened by regular cyclones and some areas of the target landscapes are prone to flooding. Increasing smallholder resilience against these threats is an objective of the Project, but they also must be recognised as an underlying risk to successful implementation of the Project. By its very nature the Project activities will be designed to mitigate risks from natural catastrophes but it is likely that Project operations will be directly impacted by natural catastrophe at some point during the project life.

** Please expand this sub-section when needed to address all potential material and relevant risks.*

H.1. Logic Framework.

Please specify the logic framework in accordance with the GCF's Performance Measurement Framework under the Results Management Framework.

H.1.1. Paradigm Shift Objectives and Impacts at the Fund level[49]

Paradigm shift objectives	
Increased climate-resilient sustainable development	The Project contributes to climate resilient development pathways by increasing resilience of the most vulnerable smallholder farmer families within the target landscapes, supporting them to the point of having viable livelihoods and providing the enabling conditions for these and other smallholder farmers to use a more entrepreneurial approach to engaging with markets. The project measures have high potential for replication both within Madagascar and in other countries with similar socio-economic characteristics.
Shift to low-emission sustainable development pathways	The Project contributes to shifting Madagascar to a low-emissions sustainable pathway in two ways: 1) it provides access to energy from low emissions sources; and, 2) it ensures the protection of carbon stocks in extremely threatened forests that are also globally important for biodiversity and nationally important for the provision of ecosystem services.

Expected Result	**Indicator**	**Means of Verification (MoV)**	**Baseline**	**Target**			**Assumptions**	**Implementing Agency(ies) Responsible**
				2.5y	**5y**	**Final**		
Fund-level impacts								
A1.0 Increased resilience and enhanced livelihoods of the most vulnerable people, communities and regions	Number of people less affected by climate-related disasters (disaggregated by vulnerable groups) due to the Project	Gender sensitive household surveys	34272	77112[50]	119952	119952[51]	Baseline : 24% [52]of local people in this region are food secure and we assumed that they are less affected by the climate risks	CI and EIB
	Number of people adopting a wider variety of livelihood strategies that make them more resilient to climate change	Gender sensitive household surveys	34272	77112	119952	119952		CI and EIB
A2.0 Increased resilience of health and well-being, and food	Number of food-secure people due to the Project	Gender sensitive	34272[53]	77112	119952	119952	Baseline for food security assumes households	CI and EIB

[49] Information on the Fund's expected results and indicators can be found in its Performance Measurement Frameworks available at the following link (Please note that some indicators are under refinement):
http://www.gcfund.org/fileadmin/00_customer/documents/Operations/5.3_Initial_PMF.pdf

[50] Target 30% of beneficiaries (30% of 142800= 23800 households x 6 size of the households)+ 24% the baseline

[51] Target 60% of beneficiaries (60% of 142800= 23800 households x 6 size of the households)+ 24% the baseline

[52] C.A.Harvey,et al.2014 ,Extreme vulnerability of smallholder farmers to agricultural risks and climate change in Madagascar. Philos.Trans.R.Soc.369(2014)20130089, http://dx.doi.org/10.1098/rstb.2013.0089.
WFP and UNICEF,Rural Madagascar Comprehensive Food and Nutrition Security and Vulnerability Analysis. Antananarivo, 2011. Available at: ⟨www.wfp.org⟩.

[53] 24% of local people are food secure. Source: .A.Harvey,et al. 2011, Extreme vulnerability of smallholder farmers toagricultural risks and climate change in Madagascar,Philos.Trans.R.Soc.369(2014)20130089, http://dx.doi.org/10.1098/rstb.2013.0089.
WFP and UNICEF,Rural Madagascar Comprehensive Food and Nutrition Security and Vulnerability Analysis, Antananarivo,2011.Available at: ⟨www.wfp.org⟩.

and water security		household surveys					reporting sufficient food all months of year are food secure	
A4.0 Improved resilience of ecosystems and ecosystem services	Area of agroforestry projects (ha), silvopastoral-systems, or other Ecosystem-based Adaptation strategies established or enhanced	Tracking of agricultural support / investment activities	1170ha [54]	7596[55]	11166[56]	11166	Have assumed average of 0.5ha per household	CI and EIB
M1.0 Reduced emissions through increased low-emission energy access and power generation	Level of capacity (MW) from low emission sources	Tracking generation from investments	0	13	33	33	Investees can provide reliable capacity data	EIB
M4.0 Reduced emissions from land use, reforestation, reduced deforestation, and through sustainable forest management and conservation and enhancement of forest carbon stocks	tCO_2eq reduced from forest/land use	Monitoring of carbon stock by comparison to baseline x C stock (see VCS Project Descriptions)	1M[57]	2.4M	7M	10M	Baseline refers to ERs generated by the project. Project is required to continue generating ERs See VCS Project Descriptions for full description of baseline, monitoring and projected ERs	CI and EIB

[54] Baseline 1170 = 9,8% of agricultural land of 23800 household beneficiaries. Each household has an average of 0.5ha agricultural land Source : FAO, 2015, Rapport final: Etablissement de la situation de référence des techniques de CSA et CA dans les grandes zones agroecologiques de Madagascar

[55] Mid term 77112ind (indicator from the A1.0) /6 size of household =12852households x 0.5ha/household =6426ha +1170 =7596

[56] 5years: 119952 ind (indicator from the A1.0) /6 size of household = 19992households x 0.5ha/household = 9996ha +1170 =11166ha

[57] Mean annual carbon stock change within CAZ and COFAV Source: CI 2013. Monitoring report carbon stock CAZ and COFAV (2008-2012). See also annex 2a for detailed discussion of this indicator

H.1.2. Outcomes, Outputs, Activities and Inputs at Project/Programme level

Expected Result	Indicator	Means of Verification (MoV)	Baseline	Target		Assumptions	Implementing Agency(ies) Responsible
				2.5 years	5 years & 10 years		
Project/programme outcomes	**Outcomes that contribute to Fund-level impacts**						
A7.0 Strengthened adaptive capacity and reduced exposure to climate risks	Number of vulnerable farmers, businesses, and public sector services use improved tools, instruments, strategies and activities for responding to climate variability and climate change	Gender sensitive household surveys	34272[58]	48,552[59]	119952 [60]	Baseline: 24% of local people in this region are food secure and we assumed that they have used improved tools	CI and EIB
Project/programme outputs	**Outputs that contribute to outcomes**						
A7.1. Vulnerability of smallholder farmer communities to climate change impacts is reduced through the establishment of a Sustainable Agriculture (including Climate-Smart Agriculture) Program	Number of individuals with vulnerability reduced	Gender sensitive household surveys	34272[61]	48,552[62]	119,952 [63]	Baseline: 24% of local people in this region are food secure and therefore less vulnerable	CI and EIB
	Number of households adopting sustainable agriculture techniques	Gender sensitive household surveys	34,272[64]	48,552[65]	119,952 [66]	Baseline: 24% of local people in this region are food secured and we assumed that they have adopted sustainable	CI

[58] 24% of local people in this region are food secured. 142800 people x 0.24 = 37272 ind. Source: C.A.Harvey,et al. 2014,Extreme vulnerability of smallholder farmers to agricultural risksandclimatechangeinMadagascar,Philos.Trans.R.Soc.369 (2014)20130089, http://dx.doi.org/10.1098/rstb.2013.0089.
WFP and UNICEF,Rural Madagascar Comprehensive Food and Nutrition Security and Vulnerability Analysis, Antananarivo,2011. Available at: ⟨www.wfp.org⟩.
[59] Mid term: 10% of 142,800ind target people)+ 34272 baseline = 48,552
[60] 5yrs: (60% of 142,800ind target people)+ 34272 baseline =119.952
[61] 24% of local people in this region are food secured. 142800ind target people x 0.24 = 37272 ind. Source: C.A.Harvey,etal.,Extreme vulnerability of smallholder farmers to agricultural risks and climate change in Madagascar,Philos.Trans.R.Soc.369 (2014)20130089, http://dx.doi.org/10.1098/rstb.2013.0089.
WFP and UNICEF, Rural Madagascar Comprehensive Food and Nutrition Security and Vulnerability Analysis, Antananarivo, 2011. Available at: ⟨www.wfp.org⟩.
[62] Mid term: 10% of 142,800ind target people)+ 34272 baseline = 48,552
[63] 5yrs: (60% of 142,800ind target people)+ 34272 baseline =119.952
[64] Cf. footnote 1
[64] 5yrs: (60% of 142,800ind target people)+ 34272 baseline =119.952
[65] Cf footnote2
[66] Cf footnote3

						agriculture techniques	
A7.2 Market and crop production information available at local level to inform crop production type) and to improve market access	Number of high potential crops with location specific market study updated	Assess Market study	3[67]	14	28[68]	Availability of documents to M&E team	EIB
	Proportion of women from supported households integrated in producer groups (women's association and farmers' associations)	Gender sensitive surveys of producer associations	5%[69]	10%	60%	Interviewees provide accurate information during surveys	CI and EIB
A7.3. Resilience to climate induced shocks and other risks is improved by supporting farmer-led, gender-sensitive analysis, planning and risk management	% of households losing more than 25% of crops (fields, crops) after climate shocks	Gender sensitive household surveys	70%[70] of households losing more than 25% of crops	60[71]% of households losing more than 25% of crops	40[72]% of households losing more than 25% of crops	Interviewees provide accurate information during survey, (Note: all household in rural areas are affected by climate shocks).	CI
A7.4. An Investment Fund is established and managed to invest in sustainable agriculture and renewable energy enterprises	US$M co-financing committed to fund	Financial report	0	15.5	15.5	This is co-financing and excludes GCF contribution of $35M	EIB
	US$M returned to investors and the CC Trust Fund	Financial report	0	1.3	64.5[73]	This includes the returns on GCF's contribution that is destined for the CC Trust Fund.	EIB
	US$M provided to CC Trust Fund	Financial report	0	0	44.7[74]	Excludes the proposed US$3.2M GCF public window seed funding. This figure will be for year 10 (not year 5)	CI and EIB
A7.5. Climate resilient sustainable agriculture	US$M committed to businesses	Contracts / Reports	0	9	19	Availability of documents to M&E team	EIB

[67] three studies on three crops: rice, banana and litchi already available. Sources: Ministère de l'Agriculture d, de l'Elevage et de la Peche. 2007. Etude des cas Programme Pays Madagascar. Analyse des Filières riz and litchit
Source : Ministère de l'Agriculture, de l'Elevage et de la Peche. 2004. Filieres del'Agriculture de l'Elevage et de la Peche et action de MAEP et filiere Banane (Fiche no 101).
[68] 4 sectors x 7 regions (7 regions: 2 in CAZ and 5 in COFAV) (ex: dry beans, fish, ginger, honey, peanuts, ground peanuts, corn, pork breeding, sugarcane, cassava, poultry …)
[69] Based on perception of women participation during the previous projects
[70] Source: .A.Harvey,etal.,Extreme vulnerability of smallholder farmers to agri-cultural risks and climate change in Madagascar,Philos.Trans.R.Soc.369 (2014)20130089, http://dx.doi.org/10.1098/rstb.2013.0089.
[71] 10% of decrease in affected households
[72] 30% of decrease in affected households
[73] *This figure will be for year 10, not year 5
[74] Ibid.

businesses are invested in	# businesses supported	Contracts / Reports	0	4	8	Availability of documents to M&E team	EIB
	# people employed	Reports from investees	0	8,880	26,840	Assumes 1 job created for 1 ha invested in.	EIB
	of which % of women	Reports from investees	0	50%	50%	Availability of documents to M&E team	EIB
	Ha under sustainable management	Reports from investees	0	8,880	26,840	Availability of documents to M&E team	EIB
A7.6. Critical ecosystems providing essential ecosystem services to smallholder farmers communities in current and future climate conditions are monitored and protected or restored) as Ecosystem-based Adaptation measures	Hectares of critical habitats managed sustainably by the local communities within the agricultural landscape	Field mapping & reports	4135[75] ha	5316[76] ha	9261 [77] ha	Availability of documents to M&E team. Access to GPS and knowledge of mapping by the field team responsible for the activity	CI
	Hectares of critical habitats restored within the agricultural landscape	Field mapping & reports	1410[78]	1590[79]	[80]2200		CI

Activities	**Description**	**Inputs**	**Description**	**Implementing Agency(ies) Responsible**
A.7.1.1 Monitor smallholder vulnerability to climate change	Gender-sensitive study to refine existing knowledge of exact communities and households with highest vulnerability risk leading to targeted planning of project responses	Transport, logistics, sampling design (expert staff time), field assistants	Design sampling for study, collect field data, analyse and use for targeting sustainable agricultural program activities at priority communities and households	CI
A.7.1.2 Share the methodology and the results on the local index of household vulnerability	Publish and disseminate information on system through a technical guide and peer reviewed publication	Staff time, printing costs, workshop	Writing documents, printing guide (to promote replication), technical workshop to present system to other potential users	CI
A.7.2.1 Disseminate sustainable agriculture techniques that improve the resiliency of vulnerable communities	Refine existing knowledge of sustainable agriculture techniques and their delivery at first target villages	Staff time, consultants, workshops, field testing	Add to existing knowledge by collecting information on appropriate techniques and delivery approaches with proven effectiveness within target landscapes.	CI

[75] Baseline: 4135ha =8% of critical habitats that are already protected of the leakage management area (51,451ha)
[76] 5% of the critical habitat will be managed sustainably by the local communities= 5% of 51451ha = 2572 + 4135 baseline = 6700ha =13%
[77] 5% of the critical habitat will be managed sustainably by the local communities= 5% of 51451ha = 2572 + 4135 baseline+ 6700ha = 9261ha = 18%
[78] Sources : Rapports des projets TAMs, Toyota, GEF SGP, ERI programme : TAMS 1400ha et Toyota 3,5ha +5 ha lakato, Anjahamana 2ha
[79] 1h/an x (35% of 260VOI=90VOI) x2 yrs= 180ha +1410 baseline = 1590ha
[80] 1h/an x (60% of 260VOI=158VOI) x 5yrs = 790ha +1410 baseline = 2200ha

A.7.2.2 Update the value chain analysis and marketing studies	Studies focussed on promising products that can be produced by smallholder farmers from CAZ and COFAV landscapes	Local consultants	Identify barriers and solutions for specific products and measures to increase value	CI
A.7.2.3 Develop labelling of products to increase value for smallholder farmers	Develop certification program for products identified in A.7.2.2 in association with accredited auditors for established eco-certification/fair trade standards	Staff time, Consultant, auditor, transport, logistics	Identify qualifying producers, prepare necessary documentation, organise audits to achieve certification	CI
A.7.2.4 Plan Ecosystem-based Adaptation measures for vulnerable smallholder farmers	Identify and agree community-level measures for Ecosystem-based Adaptation measures within each target "community territory" identified in A.7.1.1	Staff time, transport logistics	Field based participatory planning with smallholder farmer communities to identify ecosystem-based solutions for local area	CI
A.7.2.5 Implement climate-smart agriculture measures identified by the participation of local communities and vulnerable target groups identified in 2.1	Agricultural support program: agriculture / livestock / fisheries: soil conservation practices, integrated management of water for irrigation, drinking water, agroforestry, cash crop: ginger, cloves, vanilla, coffee, improving animal production, beekeeping, ecotourism community, small-scale irrigation infrastructure by using local materials, integrated pest management, seed selection, establishment of savings groups.	Technical assistance, Trainings, Agricultural inputs, Transport, logistics	Participatory planning (combined with A.7.2.4) including community specific analysis of profitability for preferred agricutlural support options, training on techniques, provision of inputs, ongoing technical assistance	CI
A.7.2.6 Provide opportunities for farmers to share knowledge and best practices on sustainable agriculture	Organise farmer to farmer trainings, participation in national/regional agricultural fairs, exchange visits	Travel, logistics		CI
A.7.2.7 Provision of technical support to farmers	Support provided through full time technicians and backstopping from regional agriculture services	Staff costs, travel, training	Local technicians will provide intensive support to 4 communities	CI
A.7.3.1 Conduct market studies of local products	Develop studies for products with high potential to add value	Consultants		CI
A.7.3.2 Create and support farmer service centres: storage, purchases, and sales	Train and equip farmer service centres to enable them to support farmers with storage, purchases and sales	Training, Equipment		CI
A.7.3.3 Establish local transformations units	Equip communities to establish local transformation units for added value	Training, Equipment		CI
A.7.3.4 Promote women producer associations	Support women's producer groups through trainings on CSA, Health (including reinforcing hygiene awareness), and Nutrition	Training, meetings	Include provision to ensure effective participation by women is possible (e.g. childcare)	CI
A.7.4.1 Create and support local risk management structures	Support the creation and operationalization of CLGRC (Local Committee for Disaster and Risk Management)	Training		CI
A.7.4.2 Participate in the development and implementation of	Support local authorities and CLGRC with annual risk management planning	Travel, logistics		CI

contingency annual plans to climate risks				
A.7.5.1 Create the Investment Fund	Complete legal documentation establishing the Investment Fund	Legal support		EIB
A.7.5.2 Hire staff and appoint boards	Establish the operational structure for the Investment Fund	Staff costs		EIB
A.7.5.3 Complete fund operating documents	Create fund operating documents	Staff costs		EIB
A.7.5.4 Solicit and receive committed funds	Solicit and receive funds for the Investment Fund	Staff costs		EIB
A.7.5.5 Establish a local office	Establish office in Antananarivo	Rent		EIB
A.7.5.6 Manage and monitor individual deals until exit	Solicit and analyse proposals, including all due diligence and ensuring ESG standards	Travel, staff time		EIB
A.7.5.7 Close the Fund	Exit all deals and wind up the Investment Fund	Staff costs		EIB
A.7.6.1 Manage and monitor investments	Manage and monitor individual deals including compliance with ESG standards	Travel, staff costs		EIB
A.7.7.1 Monitoring the state of ecosystems that provide essential services	Monitor critical ecosystems within the CAZ and COFAV landscapes that are important for ecosystem services	Satellite images, travel		CI
A.7.7.2 Model changes in essential ecosystem services due to climate change	Develop and analyse models for changes in ecosystem services within the landscapes under projected climate change scenarios	Staff time		CI
A.7.7.3 Develop management plans for protection of ecosystems that provide key essential services in 2 pilot sites in CAZ	Develop detailed plans for protection of ecosystem services for two watersheds within CAZ	Travel, logistics, meetings		CI
A.7.7.4 Conduct participatory assessments on land use including areas to be restored	Assess and design ecosystem restoration plans with smallholder communities	Travel, logistics, meetings		CI
A.7.7.5 Develop plans for restoration needed within each Municipality	Develop commune- level restoration plans based on assessments in A7.7.5	Travel, logistics, meetings		CI
A.7.7.6 Protection of ecosystems critical for the provision of essential services is promoted by local authorities (Municipalities) and by local by-laws	Work with local authorities to formalise protection of areas important for ecosystem services	Travel, meetings		CI
Expected Result	**Indicator**	**Baseline**	**Target**	

		Means of Verification (MoV)		2.5 years	5 years	**Assumptions**	**Implementing Agency(ies) Responsible**
Project/programme outcomes	**Outcomes that contribute to Fund-level impacts**						
A8.0 Strengthened awareness of climate threats and risk-reduction processes	8.1 Number of people informed on the potential impacts of climate change and range of possible responses	Gender sensitive household surveys	1500[81]	37200[82]	108600 [83]	Interviewees provide accurate information during surveys	CI
Project/programme outputs	**Outputs that contribute to outcomes**						
A.8.1 Strengthened capacity of government employees, local conservation and development NGOS, farmer groups and local communities to implement mitigation and adaptation measures to achieve Climate-smart Landscapes	# training modules developed	Training modules	1[84] manual and one poster	2	4	Excludes versions on same topic aimed at different audiences (i.e. modules will be tailored to target groups)	CI
	# men and women trained	Training reports	65 people trained [85]	28560[86]	107165 [87]	Baseline relates only to project situation	CI
A.8.2. Improved knowledge by the CAZ and COFAV population (including school children) about climate change issues and responses proposed by the project	# pack of materials developed and distributed	Teacher resource packs	0	1500[88]	3000[89]	A pack includes multiple teaching resources	CI
	Number of people (m/f) informed about climate change, Sustainable Agriculture and Ecosystem-based adaptation	Gender sensitive household surveys	1768[90]	30328[91]	108868 [92]	Assumes 50% male and 50% female. Interviewees provide accurate information during surveys	CI
Activities	**Description**		**Inputs**		**Description**		**Implementing Agency(ies) Responsible**
A.8.1.1 Develop training modules on climate change	Gender sensitive training modules developed covering climate change, sustainable landscape planning and approaches (including ecosystem-based adaptation measures), gender		Staff time, consultants		Modules should be to target 1) academics, 2) professionals working in decentralized government services, and 3)		CI

[81] 30 municipalities x 250 individuals x 2 sites. Sources : IDA/FAPE3 project Final report
[82] Mid term: 25% of 142,800 target people=35,700+1500 baseline =37,200 individuals
[83] 5yrs: 75% of 142,800 target people=107100+1500 baseline =108600
[84] *Manuel communautaire sur changement climatique et role des forets*. CI, 2011
[85] Source: Report on Training of trainers on climate change and roles of forests in Ranomafana and Fianarantsoa
[86] Mid term: 25% of 142,800 target people=35,700+65 baseline =35,765 individuals
[87] 5yrs: 75% of 142,800 target people=107,100+65 baseline =107,165 individuals
[88] Mid term: 10packs x (75 schools out of 150schools) x2 yrs =1500
[89] 5yrs: 10 packs x150 schools x4 yrs = 3000
[90] Sources project reports: Gates 495 hh; Helmsley 318hh; Toyota 765hh; TAMS 190hh. Total 1768
[91] Mid term: 20% of 142,800 target people=28,560+1768 baseline= 30,328 individuals
[92] 5yrs: 75% of 142,800 target people=107,100+1768 baseline=108,868 individuals

	mainstreaming in climate change activities and sustainable agriculture		community groups, NGOs and farmer groups	
A.8.1.2 Provide training to professionals, academics and communities	Provide training sessions using methods to reach both men & women (especially at the community level)	Travel, logistics, meetings	Training workshops	CI
A.8.2.1 Identify and prioritize target schools	Identification and prioritisation of schools to participate in: 1) curricula development and, 2) teacher training for full rollout of CC education program	Staff time, travel, meetings	Work with local education authorities to identify priority schools and develop plan for training roll out	CI
A.8.2.2 Establish agreements with target schools	Establish formal agreements with local school administrations (CISCO) and schools	Staff time	Formalise the activity	CI
A.8.2.3 Develop tools and materials related to modules	Develop teaching resources including a teacher guide and supporting materials	Staff time, consultants, printing		CI
A.8.2.4 Train teachers in the use of modules	Provide training to teachers in the CAZ and COFAV landscape, prioritising teacher trainers within CISCOs (District education administrations)	Travel, logistics, meetings	Training workshops	CI
A.8.2.5 Inform stakeholders about the project start up within both corridors	Communicate project start up and objectives through variety of media (radio, TV, brochure on project)	Media costs		CI
A.8.2.6 Disseminate research results and best practices in local and national media, flyers, posters, and CI website	Disseminate results through local and national media, flyers, posters, and CI website	Printing costs, media costs		CI
A.8.2.7 Communicate scientific research results of the project	Develop a peer review publication on the project research results	Staff time		CI
A8.2.8 Create a web page on CSL measures, eco-certified products	Develop a specific website for the project providing key information to stakeholders and external audiences	Staff time		CI
A8.2.9 Conduct exchange visits among communities	Identify best practice and organise exchange visit	Travel, logistics, meetings	Provide support so that women can participate effectively in meetings	CI
A8.2.10 Inform media and organise media visits to CSA activities	Organise media visits to project activities	Travel, logistics		CI
A8.2.11 Share research results and identified good practice on CSL measures with stakeholders	Organise annual workshop for sharing research results and good practices	Travel, logistics, meeting costs	Provide support so that women can participate effectively	CI
A8.2.12 Disseminate success stories	Develop communication kit on the CSL success stories	Printing, postage, meetings		CI

A8.2.13 Provide training through an exchange platform	Develop and use an information exchange platform to disseminate learning and training with a focus on including women and youth		Travel, meetings				CI
Expected Result	**Indicator**	**Means of Verification (MoV)**	**Baseline**	**Target** 2.5 years	**Target** 5 years	**Assumptions**	**Implementing Agency(ies) Responsible**
Project/programme outcomes	**Outcomes that contribute to Fund-level impacts**						
A5.0 Strengthened institutional and regulatory systems for climate-responsive planning and development	5.1 Proportion of regional and local planning documents integrating climate-responsive planning and development	Analysis of documents: Seven (7) *Schema Regional d'Amenagement du Territoire* (SRAT), and 68 *Plans Communal du Developpement* (PCD)	Zero of 68 PCD integrate the climate smart landscape	20 out of 68 PCD	40 out of 68PCD		CI
Project/programme outputs	**Outputs that contribute to outcomes**						
A.5.1. Strategies and actions identified in national climate change policies are integrated into decentralized planning at regional and local levels	# of guidelines developed for integration of CC and climate-smart landscape concepts into regional and local development plans	Guideline documents	PANA and one [93]Manual guide on climate change	0	2	Baseline relates only to project situation	CI
A.5.2. Intervention capacity on climate change issues of decentralized technical services is strengthened	# of co-executing entities and key decentralised technical services and local authorities with the necessary resources to support Climate-Smart Landscapes	Analysis of progress against needs	0[94]	28	56[95]	Measured in proportion to an initial needs assessment	CI
	# of functional *Centre de Service Agricole* (CSA)	Assessment of operations / functionality	Four CSA	6	13	Baseline relates only to project situation	CI
A.5.3. The monitoring and evaluation system for CSLs is operational and	M&E system operational	Absence/presence of	0	1	1	Assumes the same system provides data to	CI and EIB

[93] PANA and *un Manuel communautaire sur changement climatique et role des forets*. CI, 2011
[94] We already collaborate with them but not in the field of Climate Smart Landscape
[95] Key partners from the Decentralized services on Agriculture and Forest + local Authorities: 8 key people x 7 regions

informs adaptive management		operational database				stakeholders in all target landscapes	
	# annual reports and annual workplans using M&E data	Assessment of plans	0	4[96]	10	Assumes 1 project report and 1 annual workplan per year	CI and EIB
A.5.4. Financial sustainability of project activities is achieved through a combination of trust fund and performance based payments	Trust Fund created	Statutes approved	0	1	1		CI
	Trust Fund operational	Procedures in place; funding projects	0	0	1		CI
	Amount ($) provided to Trust Fund capital	Financial report	0	2	47.9	Includes US$3.2M of seed capital	CI and EIB
	2 REDD+ pilot projects are part of accredited carbon offset programs	Renewed accreditation	2	2	2	Baseline relates only to project situation	CI
A.5.5. Lessons learned and best practices regarding Climate-Smart Landscapes are integrated into relevant documents and relevant structures (environment, agriculture, land-use planning, Communes, regions etc.)	# of guideline documents developed	Analysis of documents	0	2	5	Baseline relates only to project situation	CI

Activities	**Description**	**Inputs**	**Description**	**Implementing Agency(ies) Responsible**
A.5.1.1 Develop practical guides for updating regional and local development plans with up-to-date climate change information	Gender sensitive methodological guide for regional and local authorities on how to plan for specific recommendations for promoting climate resiliency of rural communities	Staff time, consultants	Adapt existing guides to include climate change considerations	CI
A.5.1.2 Provide training on the use of guides to regional and local authorities	Organise trainings on the use of guides developed in A5.1.1	Travel, logistics, meetings	Training meetings	CI
A.5.1.3 Conduct communication campaigns on policies related to CC at different levels	Develop and execute a communications campaign targeting Project stakeholders	Media costs, travel, logistics		CI
A.5.1.4 Make available to the regional actors tools and data relating to the elaboration of decentralized	Participate in development of regional and local development plans and provide data needed, especially related to CC	Travel, logistics, meetings		CI

[96] One workplan/yr x 2 targets sites and annual report x2 target sites

development plan within both CAZ and COFAV				
A.5.2.1 Design training program for decentralised technical services	Conduct assessment of training needs, develop training modules based on needs assessment and provide trainings	Travel, logistics, meetings, consultants	Module development, consultants for specialised trainings, Training workshops. Include gender integration training	CI
A.5.2.2 Provide training and equipment to the BNCCC office for the coordination of CC activities in CAZ and COFAV	Conduct assessment of training and equipment needs, provide equipment and develop and provide training	Travel, logistics, meetings, consultants	Include gender integration training	CI
A.5.3.1 Develop reference methodologies for the project monitoring & evaluation system	Develop the M&E system, including a framework for evaluating what the actual on-the-ground impacts of the project interventions are on climate, ecological and social outcomes	Travel	Includes support from CI HQ units	CI and EIB
A.5.3.2 Design and continuously update the M&E database	Create and use the M&E database to inform adaptive management of the Project	Travel		CI and EIB
A.5.3.3 Collect initial baseline data for M&E database	Collect and verify initial baseline data for all indicator	Travel, logistics,	Standardise methodology for use throughout the Project	CI and EIB
A.5.3.4 Conduct monitoring and evaluation on environmental, social and process indicators	Collect, collate, analyse and present M&E data	Travel, logistics, equipment, Mobile phone data collection service contract	Field based data collection uses mobile information technology for rapid, near-real time data collection	CI and EIB
A.5.3.5 Develop and present annual reports and workplans	Report to CI/GCF and the Project Steering Committee on annual progress	Meetings		CI and EIB
A.5.4.1 Develop the Statutes and Internal Regulations of the Climate Change Trust Fund	Official creation of the Trust Fund and establishment of the Board	Legal support, Meetings, Travel	Includes international travel for support from CI's Ecosystem Finance Division	CI
A.5.4.2 Capitalize the Trust fund with $3.2M seed funding	Establish the fund with a minimum capital as required under Malagasy law and additional capital to start operations	Staff time		CI
A.5.4.3 Develop the Investment Policy (including policies for future private sector investments)	Develop the Investment Policy	Staff time, Meetings		CI
A.5.4.4 Support a minimal staff and operations	Operationalise the Trust Fund with a staff to develop and implement necessary policies and to seek additional funding to strengthen the Capital endowment		Includes developing proposal to GCF requesting the returns from the Investment Fund to be added to the TF Capital	CI

A.5.4.5 Develop a Strategic Plan for the Fund	Develop a gender-sensitive strategic plan for the Trust Fund		Staff time, Meetings		CI
A.5.4.6 Develop a Disbursement Policy/Priority Setting Policy	Develop the Disbursement Policy/Priority Setting Policy		Staff time, Meetings		CI
A.5.4.7 Develop Grant making procedures	Develop gender sensitive grant making procedures and proposal			Environmental and Social Standards to be in line with GCF requirements (currently IFC PS) and procedures to be gender sensitive	CI
A.5.4.8 Develop appropriate policies and procedures for potential GCF accreditation	Ensure that the Trust fund has appropriate policies and processes in place for GCF accreditation		Staff time, Meetings, Travel	Includes travel for support from CI HQ	CI
A.5.4.9 Disburse grants in-line with grant-making policy	Solicit proposals and provide grants in line with the grant making policy		Staff time	Assumes that returns from Investment Fund granted by GCF	CI
A.5.4.10 Manage and monitor grants	Manage and monitor grants to track progress and ensure compliance with procedures		Staff time	As above	CI
A.5.4.11 Seek additional capital from other donors	Present the Fund to other donors and seek additional Capital in line with the Strategic Plan		Staff time		CI
A.5.4.12 Communicate the activities of the Trust Fund	Communicate the activities of the Trust Fund to key stakeholders, including annual reports		Staff time, printing		CI
A.5.4.13 Provide regular reporting to GCF, GoM and other stakeholders	Provide annual reporting and respond to any additional requests for information		Staff time		CI
A.5.4.14 REDD+ pilot project 'Project Description' documents are prepared and validated	*cf.* mitigation activities, M9.1.2				CI
A.5.5.1 Develop guidelines for integrating best practices into regional and local management planning	Ensure that guidelines developed in A5.1.1 are integrated into regional and local management planning		Staff time		CI
A.5.5.2 Develop a scientific publication on the effectiveness of different Sustainable Agricultural interventions on delivering climate, social and ecological outcomes (based on the M+E of project effectiveness)	Publish relevant lessons from the Project's Adaption components in a peer reviewed publication		Staff time, publishing costs		CI
Expected Result	**Indicator**		**Baseline**	**Target**	**Assumptions**

		Means of Verification (MoV)		2.5 years	5 years		**Implementing Agency(ies) Responsible**
Project/programme outcomes	**Outcomes that contribute to Fund-level impacts**						
M6.0 Increased number of small, medium and large low-emission power suppliers	6.1 MW of capacity from low emission sources	Technical reports	0	13	33	Baseline relates only to project situation	EIB
Project/programme outputs	**Outputs that contribute to outcomes**						
M.6.1. Private sector investment made in renewable energy installations and supply chains	US$M committed in renewable energy installations/suppliers	Financial reports	0	9	18	Baseline relates only to project situation	EIB
	# of low-emission energy installations / suppliers invested in	Financial reports	0	4	7	Baseline relates only to project situation	EIB
M6.2. Clean energy generated and distributed	# of people benefitting from low emission energy sources	Technical reports	0	207750	448000	Baseline relates only to project situation	EIB
	# of deals sustainably exited as percentage of portfolio	Technical and Financial reports	0	0	100%	Baseline relates only to project situation	EIB
	# of jobs created	Technical reports	0	917	1460	Baseline relates only to project situation	EIB

Activities	**Description**	**Inputs**	**Description**	**Implementing Agency(ies) Responsible**
M.6.1.1 Identify priority low carbon energy opportunities	Identify opportunities that are national priorities and fit the Investment Fund's investment criteria	Staff time, travel		EIB
M.6.1.2 Solicit investment proposals	Solicit proposals from potential projects	Staff time		EIB
M.6.1.3 Conduct due diligence on projects	Conduct due diligence including ensuring compliance with ESG standards	Staff time, travel		EIB
M.6.1.4 Seek co-finance	Seek/leverage co-finance for deals if necessary	Staff time	Usually this will be debt taken on by the investee; Althelia is working with EIB to ensure that an adequate debt facility is in place	EIB
M.6.1.5 Develop deal structures for investment	Develop deal structures that are appropriate for the specific investment	Staff time, legal support		EIB
M.6.1.6 Negotiate and execute contracts	Negotiate and execute contract	Staff time		EIB

M.6.2.1 Manage and monitor the investment throughout its life	Manage and monitor the deal to track progress and ensure compliance		Staff time, travel				EIB
M.6.2.2 Exit individual deals	Exit individual deals at term		Staff time				EIB
Expected Result	**Indicator**	**Means of Verification (MoV)**	**Baseline**	**Target** 2.5 years	**Target** 5 years	**Assumptions**	**Implementing Agency(ies) Responsible**
Project/programme outcomes	**Outcomes that contribute to Fund-level impacts**						
M9.0 Improved management of land or forest areas contributing to emissions reductions	9.1 Forest area under improved management and reduced carbon emissions practices	PA area	655832 [97]	655832	655832	Management effectiveness at new PAs is improved over the project	CI
Project/programme outputs	**Outputs that contribute to outcomes**						
M.9.1. Key planning documents (management plans and VCS project descriptions) for CAZ and COFAV are updated	# of planning documents up-to-date every 5yrs: Management Plan (PAG) and Project Design Document (PDD)	Assess key Documents	4 [98]	4 (PDD)/ MONITORING REPORT PAG updated	2PDD monitoring report and PAG update	Includes management plans and Emission Reductions Project Descriptions, when the doc will need to be updated PAG [99]	CI
M.9.2. Improved forest management as outlined in the CAZ and COFAV management plans and Verified Carbon Standard (VCS) Project Descriptions (PDs)	Management effectiveness index (IEG) following IUCN assessment methodology	Peer evaluation	69 [100]%	72%	75%	Index evaluated annually as part of PA management process	CI
	% of planned activities in management plans that are completed	Evaluation of Annual PA reports	25% [101]	50%	95%	Baseline measured as “due to project”	CI
	# of verification reports produced	Assess verification reports	2 [102]	2 [103]	4	Baseline measured as “due to project”	CI

[97] Actual surfaces of the two protected areas (CAZ and COFAV): Decree of protected areas creation. Decree July 2015-554 for CAZ. Decree July 2015-555 for COFAV
[98] 2 PAGs and 2PDDs for CAZ and COFAV. Update every 5 yrs, last update for PAG: 2015, Next update: 2020. For PDD last update: 2013, monitoring in 2 and 5yrs
[99] Update every 5 yrs, last update for PAG: 2015, Next update: 2020. For PDD last update: 2013, monitoring in 2 and 5yrs
[100] Source: IEG report 2015:
[101] At this time, 25% of activities in PAG have been implemented
[102] Two VCS reports: one for CAZ and one COFAV in 2013
[103] Two verification reports have to be updated every 5 yrs (one CAZ and one COFAV)

M.9.3. A system of efficient and transparent governance is strengthened for CAZ and COFAV	# of annual work plans and reports approved by regional authorities and stakeholders	Assess reports and work plans	0	4	[104]10	Annual meeting of the PA Committee for Orientation and Evaluation (COE) are organised	CI
M.9.4. Forest restoration on degraded lands within the CAZ and COFAV protected areas/carbon project areas	# hectares restored	Field based mapping	6[105]	68[106]	204[107]	Restoration is taken to mean the active work needed to restore, not natural processes that need to continue to ensure ecological restoration over time	CI

Activities	**Description**	**Inputs**	**Description**	**Implementing Agency(ies) Responsible**
M.9.1.1 Update management plans	Management plans for CAZ and COFAV are updated in 2020	Travel, meetings	Meetings to ensure stakeholder participation in management plan renewal/updating	CI
M.9.1.2 Update/develop VCS and CCB Project Design documents	Project documents to maintain CAZ and COFAV as part of verified carbon programs are updated in 2018	Travel, meetings, staff time	VCS requires an update of the projected GHG emissions calculation and reanalysis of deforestation drivers every 10 years (these were first done for a 2008 baseline for CAZ and COFAV)	CI
M.9.2.1 Conduct patrol and ecological monitoring actions (participatory) within CAZ and COFAV	Community “ranger” patrols and monitoring within CAZ and COFAV	Travel	Includes field stipends needed for continual monitoring (cf. M9.2.7 for equipment)	CI
M.9.2.2 Conduct control actions by mixed brigades / support prosecution of offenses	Forestry and/or police missions to follow up on threats identified during community patrols and ensure enforcement of Protected Area regulations	Travel		CI
M.9.2.3 Materialize the limits of protected areas (external and core)	Ensure that external and internal zoning boundaries of protected areas are known at highly threatened sites (e.g. along paths)	Logistics, meetings, equipment	Signs to mark boundaries	CI
M.9.2.4 Maintain existing limited infrastructure	Existing infrastructure is maintained	Logistics, equipment, travel	Maintenance, repairs to existing infrastructure such boundary signs	CI
M.9.2.5 Conduct fire monitoring by using "fire alerts" system	Monitor fire threat using CI’s automated fire alerts system	Staff time, IT equipment	Maintenance of fire alerts system for CAZ and COFAV to track fires in near real time	CI

[104] Two annual reports x 5yrs
[105] 6ha for Toyota
[106] An average of 1 ha x 68 municipalities
[107] An average 1ha x 2years x68 Municipalities) + 68HA in the mid-year

M.9.2.6 Conduct annual deforestation monitoring through analysis of satellite imagery	Analyse threats from deforestation using remote sensing	Staff time, satellite image purchase	Precise analysis of forest loss from remote sensing analysis	CI
M.9.2.7 Provide monitoring agents (communities, technical services) with monitoring equipment	Ensure that community “rangers” and supporting technical services have the necessary equipment to record infractions and/or conservation target monitoring	Equipment	Typically GPS, notebooks, waterproof cameras	CI
M.9.2.8 Strengthen capacity of local structures on technical, legal and management aspects of forest protection.	Trainings specifically to strengthen forest management capacity for community associations and municipalities.	Meetings, travel	Trainings on monitoring, restoration forestry, legal texts, community association management	CI
M.9.2.9 Support local forest management structures	Support the operations of local management structures to strengthen protected area management	Meetings, Travel		CI
M.9.2.10 Establish databases (SMART-SMS) and provide training on their management in CAZ and COFAV	Ensure that necessary databases for protected area management are functioning and updated in near-real time with data from field to ensure that managers are able to make informed decisions and respond rapidly to deforestation threats	Equipment, travel, meetings	Training meetings	CI
M.9.2.11 Develop and submit verification reports and participate in auditor verifications	Analyse data needed for GHG emissions verifications and prepare reports for independent audit	Meetings, travel, consultants	Includes the costs of third party auditors	CI
M.9.3.1 Annual reporting on progress at protected areas to stakeholders	Develop and present annual reports and work plans to Stakeholders	Meetings, travel	Annual workshop for the validation of annual reports and work plans with the COE (*Comité d'orientation et d'evaluation*) in the corridors	CI
M.9.4.1 Conduct restoration actions within degraded zones of the protected areas	Establish native tree nurseries and plant trees in areas of CAZ and COFAV that have been degraded	Equipment, travel, staff time	Active restoration is needed where natural regeneration is unlikely due to invasive species	CI

H.2. Arrangements for Monitoring, Reporting and Evaluation

The co-executing entities will report regularly to their respective Accredited Entities following the terms of their respective subsidiary agreements. Monitoring and Evaluation requirements under these agreements will be limited to the duration of the GCF project.

The Project will establish a Monitoring, Reporting and Evaluation unit as part of the Project Management Unit. This unit will have the dual purpose of ensuring that the indicators are tracked and reported using appropriate and rigorous methodologies and protocols. It will also ensure that the results of monitoring are continually fed back to the project management team to allow an adaptive management approach to be used to keep the project on track. CI headquarters units and the EIB will provide support to the monitoring unit, notably for the development of methodologies and analysis of monitoring data. The Project director will be responsible for ensuring that monitoring is conducted in an objective and timely fashion, that transparent and replicable methods are used, and that data are stored in a secure and retrievable manner. All documents and records will be kept for at least two years after the project end date.

A detailed Monitoring and Evaluation plan will be developed at project inception in accordance with the AMAs to be signed by the Accredited Entities co-implementing the project. This M&E plan will be aligned with the logic framework provided for the project in Section H1 above. Detailed methodologies for monitoring and reporting will be developed at project start-up and included in the project's M&E manual. Once the methodologies have been finalised, baseline data on each of the project's indicators (at the level of impact, outcome, output and activity) will be collected. The M&E plan will be designed to provide data to help the PMU monitor execution of the Project activities and track progress towards achieving outputs and outcomes. Data will be reviewed regularly to help adapt Project management decisions to address any changes or issues that may arise. Data from the M&E database will be presented to the Project Steering Committee and stakeholders at least annually in an annual report. The Accredited Entities and the GCF will jointly decide on a reporting protocol that will be aligned with GCF's co-implementation requirements and guidance.

There will be three independent evaluations over the life of the Project: in Year 3, at the end of Year 5 and in Year 10. The terms of reference for these evaluations will be developed by the CI/GCF unit in collaboration with the EIB. These evaluations will include meetings with stakeholders from central government, regional and local authorities, business and civil society. Any findings from these evaluations will be addressed in the remaining time period to ensure enhanced performance. In addition, the EIB will request on a yearly basis from Althelia a specific progress report of its environmental, social and financial outcomes.

An integrated monitoring tool for this project will be used to demonstrate the impact of the interventions in the target landscapes. CI will develop a Landscape Accounting Framework (LAF) based on its Sustainable Landscape Approach[108]. The LAF will be used to track progress towards the project goal, impacts and outcomes, facilitate effective and adaptive management, and promote accountability. The LAF will ensure complete transparency with stakeholders and donors by disseminating results through three unique tools: a scorecard that captures underlying trends observed at the landscape level; an interactive dashboard that "drills down" into the data and breaks the landscape down into individual administrative units; and an interactive GIS repository that allows stakeholders to view the data used in the analysis. The framework will be built around three criteria (natural capital, production and human well-being) and the indicators to be used will be based on local circumstances and tailored to the needs of the project.

[108] See example at https://public.tableau.com/profile/carbon.fund#!/vizhome/SLPPeruAltoMayoSub-Watershed_0/LandscapeAccountingFrameworkJ

I. Supporting Documents for Funding Proposal

- ☒ Annex 1. NDA No-objection Letter dated May 19 2016
- ☒ Annex 2. Feasibility Study: 2a. Feasibility Study; 2b. Further details on the Investment Fund
- ☒ Annex 3. Integrated Financial Model that provides sensitivity analysis of critical elements (xls format, if applicable) Annex 3a Public Sector Interventions; Annex 3b Investment Fund; Annex 3c Guidance note for Public Sector Intervention Model; Annex 3d Guidance note for Investment Fund Model
- ☒ Annex 4a. Letter of commitment for co-financing Althelia
- ☒ Annex 4b. Letter of commitment for co-financing Conservation International
- ☐ Annex 4c. Letter of commitment for co-financing European Investment Bank
- ☒ Annex 5a. Conservation International Term Sheet
- ☒ Annex 5b. EIB Investment Fund Term Sheet
- ☒ Annex 5c. Trust Fund Term Sheet
- ☒ Annex 6. Environmental and Social Impact Assessment (ESIA) or Environmental and Social Management Plan (If applicable)
- ☐ Annex 7. Appraisal Report or Due Diligence Report with recommendations (If applicable)
- ☐ Annex 8. Evaluation Report of the baseline project (If applicable)
- ☒ Annex 9. Map indicating the location of the project
- ☒ Annex 10. Timetable of project implementation

Additional Annexes provided

Annex 11. Bibliography
Annex 12. Stakeholder Consultation Report: 12a. Report; 12b. Annex to report
Annex 13. EIB Madagascar Climate and Conservation Notes
Annex 14. Terms of Reference for Project governance units
Annex 15. Detailed budget and Procurement Plan
Annex 16. Gender Mainstreaming and Action Plan

REPOBLIKAN'I MADAGASIKARA
Fitiavana - Tanindrazana - Fandrosoana

MINISTERE DE L'ENVIRONNEMENT, DE L'ECOLOGIE ET DES FORETS

No-objection letter for the
"Sustainable landscapes in Eastern Madagascar" project

To: The Green Climate Fund ("GCF")

Antananarivo, August 23, 2016

Re: Funding proposal for the GCF co-implemented by Conservation International and European Investment Bank regarding the project "Sustainable Landscapes in Eastern Madagascar".

Dear Madam, Sir,

I undersigned, Nivohary Ramaroson, GCF National Focal Point of Madagascar, refer to the project "Sustainable landscapes in Eastern Madagascar" as included in the funding proposal submitted co-implemented by Conservation International and European Investment Bank to us on August 23, 2016.

Pursuant to GCF decision B.08/10, the content of which we acknowledge to have reviewed changes made to the earlier proposal, we hereby reaffirm our no-objection to the project as included in the funding proposal.

By communicating our no-objection, it is implied that:

(a) The government of Madagascar has no-objection to the project as included in the funding proposal;

(b) The project as included in the funding proposal is in conformity with Madagascar's national priorities, strategies and plans;

(c) In accordance with the GCF's environmental and social safeguards, the project as included in the funding proposal is in conformity with relevant national laws and regulations.

We confirm that our national process for ascertaining no-objection to the project as included in the funding proposal has been duly followed.

We also confirm that our no-objection applies to all projects or activities to be implemented within the scope of the programme.

We acknowledge that this letter will be made publicly available on the GCF website.

Kind regards

Le Directeur Général de Coordination des Changements

MINISTERE DE L'ENVIRONNEMENT DE L'ECOLOGIE ET DES FORETS
REPOBLIKAN'I MADAGASIKARA
POINT FOCAL DE COORDINATION DES CHANGEMENTS CLIMATIQUES

Name: Nivohary Ramaroson
Title: Madagascar Green Climate Fund
National Focal Point

RAMAROSON Nivohary

Environmental and social report(s) disclosure

Basic project/programme information	
Project/programme title	Sustainable Landscapes in Eastern Madagascar
Accredited entity	Conservation International (CI) and European Investment Bank (EIB)
Environmental and social safeguards (ESS) category	Category B

Environmental and Social Impact Assessment (ESIA) (if applicable)	
Date of disclosure on accredited entity's website	CI: May 26, 2016 EIB: May 30, 2016
Language(s) of disclosure	English and French
Link to disclosure	EIB website: http://www.eib.org/projects/pipeline/2014/20140195.htm CI website: http://www.conservation.org/projects/Pages/green-climate-fund-agency.aspx
Other link(s)	