Forest Carbon Partnership Facility (FCPF) Carbon Fund Emission Reductions Program Idea Note (ER-PIN) Country: Mozambique

ZAMBÉZIA INTEGRATED LANDSCAPES MANAGEMENT PROGRAM





Maputo, September 18, 2015



1. Entity responsible for the management of the proposed ER Program

1.1 Entity responsible for the management of the proposed ER Program			
Please provide the contact inform the proposed ER Program.	nation for the institution and individual responsible for proposing and coordinating		
Name of managing entity	Technical Unit for REDD+ (UT-REDD) - Ministry of Land, Environment and Rural Development (MITADER)		
Type and description of organization	The UT-REDD+ is a Unit within MITADER responsible for the day-to-day operations of REDD+ in the country, including leading technical studies, consultations, communication activities, meeting, as well as the coordination of the process for readiness.		
Main contact person	Mr. Momade Nemane		
Title	Unit Coordinator		
Address	Av. Acordos de Lusaka, 2115 – C.P 2020 - Maputo		
Telephone	(+258) 21 466407		
Email momedenemane@gmail.com			
Website	http://www.portaldogoverno.gov.mz / www.redd.org.mz		

1.2 List of existing partner agencies and organizations involved in the proposed ER ProgramPlease list existing partner agencies and organizations involved in the development of the proposed ER Program or that have executive functions in financing, implementing, coordinating and controlling activities that are part of the proposed ER Program. Add rows as necessary.

Sector	Name of partner	Contact name, telephone and email	Core capacity and role in the proposed ER Program
	Ministry of Agriculture and Food Security (MASA)	Mahomed Valá (+258) 828564190	Coordination and support to conservation agriculture and cash crops related activities
	Ministry of Finance (MEF)	Adriano Maleiaine	Support and coordination of financial strategy
Government	National Administration of Conservation Areas (ANAC)	Afonso Madope (+258) 823222270 afonso.madope@gmail.com	Support and coordination of activities for the Gilé National Reserve
	Zambezia Provincial Government	Abdul Noormamad Razak	Governor of the Province. Coordination of all program activities at provincial level
	Zambezia Timber Associations (AMOMA, AMAZA, APAMAZ)	Several Associations	Support on the organization and engagement of individual forest concessionaires
Private Sector	CTA – Confederação das Associações Econômicas de Moçambique	Assane Chaual (+258) 825730890 chaualparia@yahoo.com.br	Support to development of sustainable businesses and value chains
	Zambézia Timber Association	Rui Silva (+258) 860460277	Promotion and engagement of local loggers with sustainable forest management
	Etc Terra	Corentin Mercier E-mail: <u>c.mercier@etcterra.org</u>	Support to MRV and technical assistance for conservation agriculture activities and cash crops
	International Institute for Environment and Development (IIED)	Isilda Nhantumbo E-mail: <u>isilda.nhantumbo@iied.org</u>	Support/implement activities related to community forest management
	FAO	Carla Cuambe E-mail: carla.cuambe@fao.org	Implement a pilot project on payment for environmental services
	ADRA – Agência Adventista de Desenvolvimento e Recursos Assistenciais	Farai Muchiguel E-mail: fmuchiguel@adramozambique.org	Technical assistance for conservation agriculture and sustainable livelihoods
	ORAM – Associação Rural de Ajuda Mutua	Lourenço Duvane Phone: +258 24214409	Technical assistance for conservation agriculture and sustainable livelihoods
NGO's, Academia, and Development	ITC – Community Lands Initiative	Hilário Patricio (+258)24217762/842415538 <u>hpatricio@itc-f.org</u>	Support to participatory and community strengthening, land planning and land zoning
Partners	PRODEZA — Projeto de Apoio ao Desenvolvimento Rural na Provincia da Zambézia	Johnny Colon 24210732 prodeza.prodeza@tdm.co.mz	Technical assistance for conservation agriculture, sustainable livelihoods and rural development
	RADEZA – Rede de Organizações para Ambiente e Desenvolvimento Comunitário Sustentável da Zambézia	Daniel Maula Phone: (+258) 824321280 E-mail: radezamoz@yahoo.com.br	Technical assistance community development and natural resources management
	World Vision	Mauricio Munikele (+258) 24212075	Technical assistance community development and natural resources management
	International Foundation for Wildlife Management (IGF)	Alessandro Fusari <alessandrofusari@yahoo.it></alessandrofusari@yahoo.it>	Sustainable Forest and Wildlife Management
	Universidade Pedagogica (GADEC)	Manuel José de Morais (+258)24216298	Education, research and capacity building for Environmental Management and Community Development
	Uni-Zambeze (FEAF)	Noé Ananias Hofiço (+258) 8170940/842642706 n_hofico@yahoo.com.br	Education, research and capacity building in forestry and agriculture

2. Authorization by the National REDD+ focal point

Please provide the contact information for the institution and individual who serve as the national REDD+ Focal Point and endorses the proposed ER Program, or with whom discussions are underway

Name of entity	Technical Unit for REDD+ (UT-REDD) - Ministry of Land, Environment and Rural Development (MITADER)	
Main contact person Mr. Momade Nemane		
Title	Unit Coordinator	
Address Av. Acordos de Lusaka, 2115 – C.P 2020 - Maputo		
Telephone	(258) 21 466407	
Email momedenemane@gmail.com		
Website	http://www.portaldogoverno.gov.mz and http://www.redd.org.mz/	

2.1 Endorsement of the proposed ER Program by the national government

Please provide the written approval for the proposed ER Program by the REDD Country Participant's authorized representative (to be attached to this ER-PIN). Please explain if the national procedures for the endorsement of the Program by the national government REDD+ focal point and/or other relevant government agencies have been finalized or are still likely to change, and how this might affect the status of the attached written approval. ER Program) must be located in a REDD Country Participant that has signed a Readiness Preparation grant agreement (or the equivalent) with a Delivery Partner under the Readiness Fund, and that has prepared a reasonable and credible timeline to submit a Readiness Package to the Participants Committee

The UN Framework Convention's REDD+ focal point in Mozambique is the Technical Unit for REDD+ (UT-REDD) within the Ministry of Land, Environment and Rural Development (MITADER), which was established by a National Decree in 2013. The Ministry was engaged in the preparation of this ER Project Idea Note (PIN), and endorses it as an initiative that will be carried out as part of the National REDD+ Strategy (NRS).

The Zambezia Integrated Landscapes Management Program (ZILMP) is presently being formulated under the joint supervision of MITADER, the Ministry of Agriculture and Food Security (MASA) and the Ministry of Economy and Finance (MEF), which demonstrates the commitment of the new Government of Mozambique¹ in promoting sustainable forest and landscape management and rural development in an integrated fashion. This current process led by the UT-REDD+ bring together all national endorsements needed for the implementation of the ER Program, and submission or signature of any ERPA with the FCPF Carbon Fund. Please see attached (annex 2) the government endorsement letter.

2.2 Political commitment

Please describe the political commitment to the ER Program, including the level of support within the government and whether a cross-sectoral commitment exists to the ER Program and to REDD+ in general.

Mozambique is one of the 47 countries that joined the FCPF for the preparation of its National REDD+ Strategy, which will be implemented from 2016 onwards. The recently established Ministry of Land, Environment and Rural Development (MITADER) now consolidates the responsibilities of Land (demarcation, land use planning, and registry), Environment (regulations, enforcement and protected areas management) and Rural Development (poverty reduction in rural areas). This restructuring is a clear

¹ The new Government took office in January 2015, after general elections in October 2014.

indication of the Government's vision and commitment to promote a landscape-based approach to forest and natural resources management, placing the well-being of people as both an end in itself and a means to promote conservation of forest and other natural resources.

The Ministry of Agriculture and Food Security (MASA) maintains its focus on promoting agriculture productivity and management of both natural and planted forests in the country. However, all affairs related to REDD+ that were under the management of MASA will now migrate to MITADER's coordination. The Ministry of Economy and Finance (MEF), which brings the former Ministry of Planning and Development and the MEF into one Ministry, is also actively engaged on issues related to climate change in Mozambique, and manages the Climate Change Unit (UMC), which has implemented the Pilot Project for Climate Resilience².

The Assembly of the Republic approved the five-year program of the Government for 2015-2020. Taking into account the macro-economic, social, political, environmental and cultural conditions, the program aims to improve the living conditions of the Mozambican people for employment, increased productivity, competitiveness, wealth creation and promoting development.

Its operation will be possible through improved governance, political articulation and public and private investment priority areas and to transform the social and economic structure of the country. The program is structured on five pillars:

- Consolidation of National Unity
- Develop human and social capital
- Promote employment, productivity and competitiveness
- Develop economic and social infrastructure
- Ensure sustainable and transparent management of natural resources and the environment

The REDD+ and the Zambézia Integrated Landscapes Management Program (ZILMP) in particular will contribute to the strengthening and integration of state capacity to implement the Five-Year Plan of the Government through various activities, as described in details in section 5.

Within the government 5 year program, MITADER's has launched the "Programa Estrela", aiming to develop physical and social infrastructure (access to markets, water, energy, finance and knowledge) to catalyze sustainable production in rural areas. Results in terms of decentralization and diversification of the economy, increased resource sustainability, poverty reduction and productivity increase would be achieved through service and production hubs, including agriculture and tourist hubs. One of the key geographical areas of this Program is the Zambézia Province.

According to Mozambique's R-PP, the Zambézia province was designated to host an ER Program. Existing knowledge from the Zambézia ER Program will enable fast-tracking the implementation of the National REDD+ Strategy, besides generating important results and outcomes on the ground such as poverty alleviation, improved governance and social development, that are highly expected under the national government plans.

The ZILMP is endorsed as a major priority by the Government of Mozambique and the Provincial Government of Zambézia. The implementation of the ZILMP will be coordinated by the UT-REDD+ at MITADER and implemented by various partners, under consultation with the multi-stakeholder REDD+ Technical Working Group. Our goal is to create innovative and decentralized governance arrangements at the National, Provincial and District levels, including the government, private sector and civil society

² Mozambique has been part of the PPCR since 2010 with an \$86 million investment plan. More information available at: https://www.climateinvestmentfunds.org/cifnet/?q=country/mozambique.

stakeholders, and at the same time promote reduced greenhouse gas emissions from the land sector, from deforestation and forest degradation and from sustainable agriculture, as well as smarter land-use planning, and policies.

3. STRATEGIC CONTEXT AND RATIONALE FOR THE ER PROGRAM

3.1 Brief summary of major achievements of readiness activities in country thus far

Please briefly provide an update on REDD+ readiness activities, using the component categories of the R-PP as a guide. If public information is available on this progress, please refer to this information and provide a link.

The Forest Carbon Partnership Facility (FCPF) supports the Government of Mozambique financially and technically on the REDD+ Readiness Process, through a grant of \$ 3.8 million, signed in July 2013 (which will last until July 30, 2017). Currently the Government of Mozambique is preparing a Mid-Term Progress Report and will request additional USD 5M FCPF grant to finalize the REDD+ Readiness Process. The UT-REDD+, based in MITADER, is responsible for the technical implementation of the activities financed by the FCPF grant, while the National Environment Fund (FUNAB) is responsible for fiduciary management.

The national REDD+ readiness process goal is to strengthening national management arrangements, promoting multi-stakeholder consultations and preparing the National REDD+ Strategy. In August 2013, the Technical Unit for REDD+ (UT-REDD+) was created, and officially established by the National Decree 70/2013 ("Regulation on Procedures for Approval of Emission Reduction Projects of Deforestation and Forest Degradation - REDD+"), approved by the Presidential Cabinet in December 2013. In 2015, the UT-REDD+ has been strengthened with 8 full-time dedicated employees: i) a senior technical assistant; ii) a pilot project coordinator; iii) a coordinator for the Zambézia Program; iv) a coordinator for the Cabo Delgado program; v) a financial specialist; vi) a procurement specialist; vii) a communication specialist; e viii) a safeguards specialist. It is planned that by September a MRV specialist and a REDD+ Strategy technical assistance will also be hired.

The National Steering Committee or **Technical Revision Committee** (CTR) for REDD+ is in place and having regular meetings. It has the goal of promoting inter-institutional coordination among sectors and stakeholders, and is composed by representatives from the Ministry of Culture and Tourism, Ministry of Gender, Ministry of Education, Child and Social Action, Ministry of Industry and Commerce, Ministry of Economy and Finance, Ministry of State Administration and Public Function, Ministry of Justice, Constitutional and Religious Affairs, Ministry of Mineral Resources and Energy, as well as by representatives from the private sector, NGOs and research institutions. **Decentralization of the REDD+** is also taking place, as local coordinators were hired to oversee and coordinate the ER Programs in Zambezia and Cabo Delgado provinces, and province-level multi-stakeholder committees were created in the two provinces.

In regards to the promotion of **multi-stakeholder consultations**, the government has conducted 22 public consultations related to the preparation of the National REDD+ Strategy at both national, province and district levels. Several **communication materials** were produced and disseminated, including a website, Facebook page and publications. In 2014, the UT-REDD+ established a dialogue platform with civil society, private sector and NGOs in order to carry out communication and outreach programs. The platform has shown to be an effective instrument to help disseminate, discuss the Decree 70/2013 and other REDD+ related issues.

A first draft of the National REDD+ Strategy is expected to be finalized by December 2015 and presented at COP 21 in Paris. This Strategy is being prepared based on ongoing analytical studies: Analysis of drivers of deforestation, forest degradation and strategic option to address those drivers; Legal and institutional frameworks for REDD+; the Strategic Environmental and Social Assessment (SESA) for REDD+; Studies and

workshops to settle the definition of forest in Mozambique; and broad support to enhance communication, consultation and outreach to several stakeholders.

Institutional framework for REDD+. Mozambique adopted the Decree 70/2013 in December 2013 and was one of the few countries worldwide to establish rules and procedures to guide investments in REDD+ as well as define the legal treatment of REDD+ demonstration projects. The Strategic Environmental and Social Assessment (SESA) and the in-depth analysis of the Legal Framework for REDD+, currently being undertaken by UT-REDD+, provide an excellent opportunity to evaluate how REDD+ is currently functioning from an institutional perspective. By identifying issues that currently constrain a streamlined implementation of REDD+, UT-REDD+ will have the opportunity to establish an improved and more concrete structures within MITADER, with defined roles and responsibilities for internal technical officers that will be in charge to implement REDD + activities.

Monitoring, Reporting and Verification. The establishment of the national MRV system is being supported by the Japanese International Cooperation Agency (JICA) through a project initiated in 2013 that aims to: (i) establish a Forest Resource Information Platform for monitoring REDD+; (ii) develop the basis for a MRV; (iii) create RELs/RLs and; (iv) prepare a data set of biomass and carbon estimation. MRV will be undertaken with consideration of consistency in recording and collection procedures, data base structure and management, and in light of the integration of a new, more comprehensive system of cartography.

Two large-scale landscape / REDD+ Programs have been identified by the national government: the Zambézia Integrated Landscape Management Program (ZILMP); and the Cabo Delgado/Quirimbas Emissions Reductions Program. Other REDD+ initiatives are under implementation by other partners such as the one by the <u>Envirotrade company in Sofala Province</u>, and by <u>IIED in the Beira Corridor</u> (which is still at early stage). Since June 2015 UT-REDD had hired 2 technical officers to coordinate REDD+ activities in Cabo Delgado and Zambézia provinces, and created Provincial REDD+ Forums in both landscapes. The forums are already operational and ensuring consistency in the implementation of REDD+ between national and subnational levels.

Forest Policy and Strategy 2016-2020: as part of GoM commitments to reducing deforestation, an innovative Forest Policy is being designed solely focused on forests resources. The vision is thriving forests that provide goods and services to society through valuing and managing the forest heritage in a sustainable, responsible and transparent manner, for the economic, social and ecological benefit of the current and future generations of Mozambicans. The Forest Policy will have four objectives: (i) social participation and equitable benefit sharing mechanisms; (ii) environmental sustainability on use of forest resources; (iii) increase the economic contribution of forests to the country's development and; (iv) strengthening of legal/institutional frameworks for sustainable forest management.

The structure of the policy will be based in the following areas:

- i. Conservation and valuing of standing forests: enhancing the conservation and enhancement of forests, rather than extraction of forest resources, in order to curb the current rate of deforestation and forest degradation
- **ii. Financial sustainability of forest based activities:** creating the conditions, incentives and instruments to enforce Mozambique's capacity to attract national and international finance and investments for increased state revenues towards rural development activities
- **iii. Building national capacity:** improve governance capacity at multiple levels for the protection, conservation, creation and sustainable use of forest resources
- iv. Transparency and publicity: access to information, citizen participation in decision-making

v. Climate change mitigation in the forest sector: to maximize the forest sector capacity to promote climate change mitigation as part of Mozambique's national plan for climate change and Intended National Designated Contributions to UNFCCC

The Policy will also create a strategic and national wide program called "Standing Forests Program (SFP)", focused in promoting rural development based on forest conservation, with focus on alternative activities to natural resources extraction and good forest management practices. The Standing Forests Program will be the back-bone of the 5th strategic objective of the Government's Five-Year Plan (2015-2019): "Transparent and sustainable management of natural resources and the environment".

Standing Forest's Program sub-components:

- Supporting carpentry in the main forest districts
- Value-added processing for industrial forest products and other NTFPs
- Promotion and structuring of forest nurseries and seed's networks
- New models for forest concessions: multifunctional concessions, formation of associations, forest certification and community forestry, etc.
- Biodiversity offsets and climate related finance
- Sustainable energy: improved cook stoves, biomass plantations, etc.

An exclusive Forest Law will replace the existing Forest and Wildlife Law, necessarily following the adoption of the new Forest Policy. The new Forest Law will establish a "Timber Moratorium" that will begin in 2016 and involve the suspension of certain forest operations for a determinate period of time to allow reorganization of the sector, with a focus on sustainability. The Forest Law will also initially create three new institutions: (i) the Sustainable Development Fund (SDF), under MITADER; the National Forest Institute (INFLOR) and; a new "law-enforcement and monitoring model/institution" (to be defined).

3.2 Current status of the Readiness Package and estimated date of submission to the FCPF Participants Committee (including the REL/FRL, REDD+ Strategy, national REDD+ monitoring system and ESMF).

It is estimated that Mozambique will complete the Readiness Package (including the NRS; MRV system; the RL/REL; safeguards instruments and studies as SESA; design and implementation of the information system, etc.) by mid-2016. Another year may be needed to define financial requirements, procedures, and negotiations to access results-based payments from the FCPF Carbon Fund and to assure financial sustainability. It is estimated that this readiness process will be concluded by early 2017.

Table 1: Status of implementation of Readiness Package activities updated in August 2015

COMPONENT	SUB-COMPONENT	DESCRIPTION OF PROGRESS	STATUS
1. READINESS	1a. National	The UT-REDD+ team is now composed by 8 experts: Financial,	Significant
ORGANIZATION	Management	Procurement, safeguards, communication specialists; technical	Progress
AND	Arrangements for	assistant; pilot project coordinator at national level, pilot	
CONSULTATION	REDD+	project coordinators in Zambézia and Cabo Delgado	
		Provinces. UT-REDD+ is also hiring a MRV specialist and a	
		technical assistant for the preparation of the REDD+ Strategy	
		(expected by October). The national steering committee	
		(Comite Tecnico de Revisao) is also in place and having regular	
		meetings. Decentralization of REDD+ is taking place through the	
		provincial coordinators and the provincial REDD+ forums.	
	1b. Consultation,	There has been several awareness raising activities, and 22	Progressing
		public consultations. Following the Consultations plan drafted	well, further

	Participation, and Outreach	as part of the SESA design, district level and community level consultations have been held: in the northern region five communities in three districts; and in the central region two communities in two districts and 5 communities in the North and Central regions Information and communication material about REDD+ was prepared and distributed (pamphlets, policy briefings, radio and TV material, cartoon, etc), and a website was created. http://www.redd.org.mz/	development required
2. REDD+ STRATEGY PREPARATION	2a. Assessment of Land Use, Land-Use Change Drivers, Forest Law, Policy and Governance	The following studies were successfully hired and commissioned to support preparation of the REDD+ Strategy: i) Strategic Environmental Social Assessment including ESMF/RPF/GRM; ii) Drivers of deforestation and degradation and strategic options to address those drivers; iii) Analysis of the Institutional and Legal Framework, including the Benefit Sharing Mechanism; iv) Definition of forest; v) MRV system and REL preparation; vi) Consultant to compile the National REDD+ Strategy	Progressing well, further development required
	2b. REDD+ Strategy Options	Regarding the preparation of the National REDD+ Strategy, all the firms that are conducting the technical studies for the preparation of the REDD+ Strategy are hired. Studies are currently advancing seamlessly, and the National REDD+ Strategy will be completed by December 2015 to be presented at the UNFCCC Paris COP. The preparation of 2 landscape pilot projects will contribute to generate lessons to the REDD+ Strategy: The Zambézia Integrated Landscape Management Program and the Cabo Delgado/ Quirimbas Landscape Program.	Significant Progress
	2c. Implementation Framework	The GoM has created a National Decree that provides the basis for the regulation of REDD+ in Mozambique, and creates the National Steering Committee or Technical Revision Committee (CTR) for REDD+ among other issues. The CTR is composed by members of the government and civil society organizations, and meets regularly to discuss the progress of REDD+ implementation – including the pilot ER Programs in Zambézia and Quirimbas.	Progressing well,Further development required
	2d. Social and Environmental Impacts	The consultant firm for SESA was hire and the work is progressing well. It is expected to have the safeguards instruments SESA, ESMF, and RPF by early 2016. Those instruments will be prepared to the National level, but will use as case studies both pilot projects. A Grievance Redress Mechanism will be prepared under the RPF. The safeguard specialist at UT-REDD+ was hired and is supervising the implementation of the SESA package in accordance with the World Bank safeguard policies.	Progressing well, further development required
3. REFERENCE EMISSIONS LEVEL/ REFERENCE LEVELS	3a. RL/REL	UT-REDD+ is liaising with the National Forest Inventory Department at MITADER, and JICA in developing the Forest Information Platform and National Reference Emissions Level. We expect significant progress at subnational level in the ER Programs in Zambézia and Quirimbas, that will feed the National REL.	Progressing well, further development required
4. MONITORING SYSTEMS FOR FORESTS, AND SAFEGUARDS	4a. National Forest Monitoring System	Meetings with various government actors, donors, academia, and civil society have been conducted to better understand the capacity already installed in the country for the creation of an MRV system. The MRV roadmap to further guide the MRV process was created. UT-REDD+ has advertised for the position of an MRV-Specialist to enhance the staff capacity and is expected to be filled by Sep 2015. JICA proving technical training for GoM staff. JICA is also performing a national forest inventory and REL for 2 provinces. The GoM, JICA and the WB discussed on aligning efforts to finalize the forest inventory for the whole country, and the REL.	Progressing well, further development required

System, Multiple	As discussed in 3d. the creation of an information platform is under process, and we expect more relevant progress in the first semester of 2016.	Further development required
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3.3 Consistency with national REDD+ strategy and other relevant policies

Please describe:

- a) How the planned and ongoing activities in the proposed ER Program relate to the variety of proposed interventions in the (emerging) national REDD+ strategy.
- b) How the proposed ER Program is strategically relevant for the development and/or implementation of the (emerging) national REDD+ strategy (including policies, national management framework and legislation).
- c) How the activities in the proposed ER Program are consistent with national laws and development priorities.

a) How the planned and ongoing activities in the proposed ER Program relate to the variety of proposed interventions in the (emerging) national REDD+ strategy.

The REDD+ Readiness Process aims to develop legal and institutional frameworks and guidelines for implementation of the activities addressing the drivers of deforestation and degradation, as well as promote conservation, sustainable forest management and enhancement of carbon stocks.

However, there is a significant distance between theory and practice when it comes to implementing REDD+ policies and programs. Therefore, replicable experiences and lessons will be gleaned from similar operations in Mozambique and beyond that successfully integrate mitigation with co-benefits to inform the Zambezia Integrated Landscapes Program (ZILMP). Valuing forest products and ecosystem services is instrumental to promote low emissions development and social wellbeing through multi-sector interventions. We expect to use the ZILMP as a pilot to test and implement key interventions to address deforestation and to promote low emissions rural development. There is a fine correlation between implementation challenges of the Program and those across the rest of the country. The experiences emerging from the program implementation will generate important lessons learned for the implementation of the second Landscape/ER Program in Quirimbas and also the National REDD+ Strategy (NRS) in Mozambique.

The draft National REDD+ Strategy highlights the following pillars:

- **Agriculture**: to promote alternatives practices to current slash and burn activities, which ensure increased productivity of subsistence and cash crops;
- **Energy**: to increase access to alternative energy sources at urban areas, and to increase efficiency on production and use of biomass energy.
- **Conservation Areas**: to strengthen the conservation areas system, and to find concrete livelihood options for the population that live in those areas.
- **Sustainable Timber Forest Management:** to promote forest concession adding value to non-timber forest products.
- **Forest Plantations:** to improve business climate for planted forest and to improve the relation between rural communities and forest companies.
- **Cross-sectoral activities:** to create a legal and institutional platform for cross-sectoral coordination for land-use activities.

All the above interventions are established as priorities for ZILMP and will be coordinated with the National REDD+ Strategy.

b) How the proposed ER Program is strategically relevant for the development and/or implementation of the (emerging) national REDD+ strategy (including policies, national management framework and legislation).

The ZILMP is fully aligned with the National REDD+ Strategy and represents an important mechanism for implementing REDD+ in Mozambique. Activities and results from the Program will enable the National REDD+ Strategy to:

- Test hypothesis; refine management structures and intervention activities, including those relating to enabling conditions, policies and legislation, institutional coordination, capacity development, productivity enhancement, and market development;
- ii. Identify unforeseen gaps and needs; improve strategy design and future interventions. This ongoing linkage and feedback will contribute to the strengthening of the process of building and testing a REDD+ institutional structure and architecture and an adaptive management system.

Likewise, the experiences and lessons learned from the ZILMP interventions (institutions, policies, management techniques and enabling conditions such as land delimitation and titling, land use planning, monitoring, control and oversight) will help to fine-tune and extend the REDD+ activities and interventions to other areas of the country in the future. Experiences emerging from the ERP intervention will also contribute to the development of integrated landscape management capacity, with positive spillover effects to state administration at district, provincial and national levels.

c) How the activities in the proposed ER Program are consistent with national laws and development priorities.

All activities proposed in the ZILMP are consistent with national laws and development priorities, as presented in section 2. Table 3 presents how the key specific program activities fit on the five pillars of the national government plan for 2015-2020.

Figure 1: Integration of ER Program Activities and the Five Pillars of Mozambique's National Government Plan for 2015-2020

 Strenghtening of provincial and district governments and integrated planning 1. Consolidation of National Unity Partnerships with civil society organizations, private sector and local communities on REDD+ Construction of "bottom-up" community, district and provincial level development plans • Research and development of new technologies for efficient and sustainable production 2. Develop human and social capital Capacity building on conservation agriculture, agroforestry and forest plantations Creation of National and Provincial REDD+ Foruns to participatory discussions of public policies Promotion and incentives for sustainable companies and entrepreuners on ZILMP activities 3. Promote employment, productivity • Strenghtening of key sustainable agriculture supply chains (cashew, beans, seasame, etc.) and competitiveness Promotion of sustainable forestry: SFM, NTFP, forest plantations, woodlots, etc. Promotion of conservation agriculture and deforestation free cash-crops 4. Develop Economic and Social No specific activities planned in the ER Program Infrastructure Improving national capacity on law enforcement, environmental governance and MRV 5. Ensure Sustainable and transparent Strenghtening of the local Natural Resources Management Committees (NRMC) Establishment of community managed forestry and agroforestry areas

Mozambique has a progressive legal framework for the promotion of sustainable forest management. Through forest sector legislation (Law on Forests and Wildlife, 1999) and regulatory procedures for land management (The Land Law 1997), Mozambique seeks to balance social, environmental and economic issues, paying special attention to the role and benefits to rural communities. The current Standing Forest Plan will also be fully in line with the ZILMP. Mozambique has also ratified various international conventions and regional protocols linked to the management of forest resources (Table 3).

Table 3: Relevant legislation for REDD+ in Mozambique

Classification	Description
Laws	Law 20/1997, of 07 October, Environmental Law
	Law 19/1997, of 01 October, Land Law
	Law 10/1999, 07 July, Wildlife and Forestry Law
	Law 16/2014, 20 June, Conservation Law
	Regulation on Land Law, approved by Decree 66/98 of 8 December
	Regulations of the Wildlife and Forestry Law, approved by Decree 12/2002
	Regulation on Valuing of Timber, approved by Decree 21/2011, of 1 June
Desulations	Regulation on procedures for approval of REDD+ projects, approved by Decree 70/2013 of 20
Regulations	December
	Decree 76/2011, 30 of December, updates the value of fines per wildlife and forestry infraction
	Decree 30/2012, 01 of August, defines the requirements for Simple License Regimes, and the
	terms, conditions and incentives for the establishment of Planted Forests
	Ministerial Diploma 93/2005, 04 of May, established the mechanisms for channelling the 20%
	revenues from wildlife and Forestry exploration, towards the benefits of communities that
	inhabit the areas where the exploration of such resources is taking place
Ministerial	Ministerial Diploma 51/03, 14 of May, establishes that 40% of the value of taxes should be
Diplomas	returned to the operators that are undertaking secondary processing of timber
	Joint Ministerial Diploma 293/2012, of 7 of November (MINAG, MITUR and MF), updates the
	taxes for Wildlife and Forestry exploration
	Ministerial Diploma 8/2007, of 24 of January that reclassifies the species of Mondzo, Pau-ferro,
	Chanato and Muanga as first class, forbidding their export as unprocessed wood

4. ER Program location and lifetime

4.1 Scale and location of the proposed ER Program

Please present a description and map of the proposed ER Program location and surrounding areas, and its physiographic significance in relation to the country. Indicate location and boundaries of the proposed ER Program area, e.g., administrative jurisdiction(s).

Mozambique has an area of 800,000 KM², and a population of 25 million people. The country is richly endowed with natural resources – arable land, forests, fisheries, water and mineral resources. Mozambique's economy has experienced some of the world's fastest growth rates since the end of its devastating civil war in 1992, with an annual average economic growth of around 7.5% in the last decade. This growth was largely driven by investments in and exports from capital intense of the country's energy and mineral resources (AfDB, OECD, UNDP 2014).

Mozambique has the 5th highest GDP growth rate in Africa, but still faces profound development challenges, as rapid growth has not resulted in a significant reduction of poverty. It is still one of the world's poorest countries with about 54% of the population living below the poverty line and 70% of the population live in rural areas. As evidenced by the country's low level of the Human Development Index (178 out of 187 countries in 2014), development challenges include basic health and education services, employment promotion, diversification of income sources and improvement of food security (AfDB, OECD, UNDP 2014). Poverty is mostly concentrated in rural areas where many households derive their income from agricultural and forestry related activities.

As the country continues its rapid development based on natural resource-related activities such as mining and, to a lesser extent, plantation agriculture and forestry, the challenge going forward will be to

develop the nation economically while maintaining the productivity of the resource base upon which most of the population directly depends for their survival; water bodies, forests, soils, wetlands. According to FAO, the country's deforestation rate is 0,58%/year, and accounts for an annual forest loss of approximately 220,000 ha. This is almost half of Brazil's total annual forest loss (480,000ha), despite the fact that Brazil has 12 times more forests than Mozambique.

About 51% of the country's territory of 65.3 million hectares is currently covered by forests (40.6 million hectares), while other woody plants (shrubs, bushes and forests to shifting cultivation) cover about 14.7 million hectares (19% of the country). The productive forests (for timber production) cover about 26.9 million hectares (67% of the forest area). Thirteen million hectares are not favorable for timber production, in which the majority is located within the National Parks, Nature Reserves and other conservation areas.

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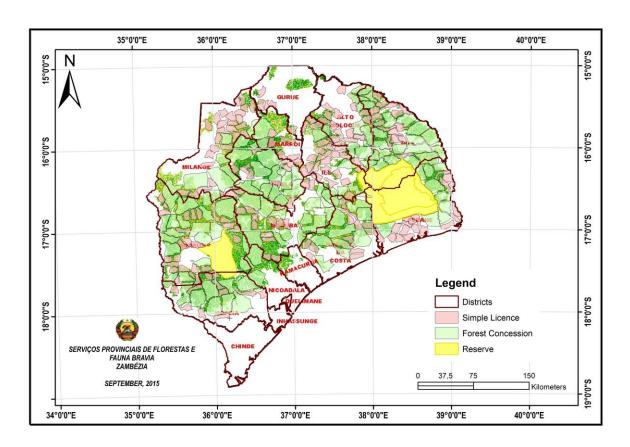
Figure 2: Forest areas in Mozambique

Source: Global Forest Watch (2015)

The Zambézia province was among the ones selected for pilot programs in the context of development of the R-PP. A broad study was led by DNTF in the province during 2010. Various weaknesses were identified and supported the need to prioritize Zambézia in the country's REDD+ context. Supporting the development of an information management system that can effectively help in organizing the registry in Zambézia, and monitoring land use changes will lay a good foundation for the strengthening of land-use planning and registry-related activities in the rest of the country.

The forests that benefit from some form of legal protection or conservation status cover about 22% of the forest area of the country. Zambezia is **one of the provinces with the largest contribution to the productive forests and forests concessions, with 4.1 million hectares and 48 concession licenses, only behind Niassa (6.0 million hectares) – see Figure 3.**

Figure 3: Forest Concession Areas in Zambézia



The ZILMP will cover a total area of more almost 4 million hectares, of which 2,3 million are forests bundled in seven districts: Alto Molócue, Ile, Gilé, Pebane, Maganja da Costa, Mocubela and Mulevala. These districts were strategically selected because they represent a strong area of expansion for deforestation within the province: the annual deforestation rate in the program area is 0.75%, and represents a forest loss of 18.000 ha/year.

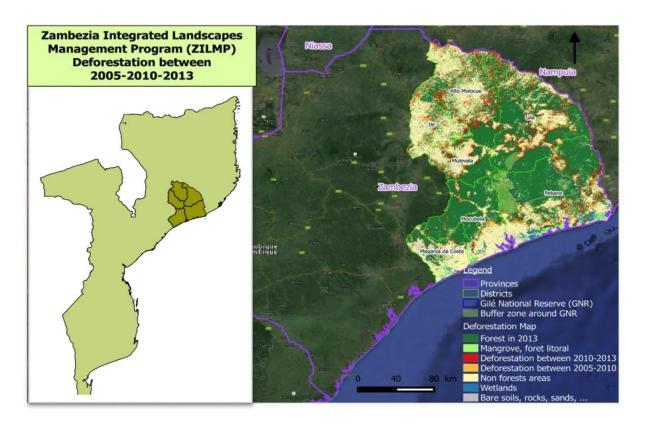
Table 4: Forest cover, deforestation and population in the program area.

Districts	District Area (ha)	Forest Area - 2013 (ha)	Percentage of forest (%)	Population 2015* (n. habitants)	Rural population (%)	Population density (hab/ha)
Alto Molocué	630.812	331.595	53%	375.504	72%	0,60
Gilé	896.516	618.190	69%	331.706	100%	0,37
Ile	303.411	104.828	35%	107.149	100%	0,35
Maganja da Costa	267.925	137.474	51%	110.059	93%	0,41
Mocubela	499.234	348.979	70%	204.395	93%	0,41
Mulevala	261.685	122.096	47%	91.275	100%	0,35
Pebane	1.005.479	639.135	64%	224.462	90%	0,22
Total	3.865.062	2.302.297	59,57%	1.220.088	93%	0,39

The justification for selecting just a sub-set of the province to serve as the pilot for the ER Program is based in three key factors: (i) it comprises all districts in the buffer zone of the Gilé National Reserve and Ilhas Primeiras e Segundas Reserve; (ii) it already comprises a significantly high population (1,5 million

people) that will demand large scale efforts; (ii) as it is the first ER Program in Mozambique there is a lot of expectations and numerous challenges to be tackled – we would rather start "small", learn fast and get well done, then to be too ambitious and fail over the course of the program.

Figure 4: Zambézia Integrated Landscapes Management Program (ZILMP) – Boundaries and Deforestation



5.1 Analysis of drivers and underlying causes of deforestation and forest degradation, and conservation or enhancement trends

Please present an analysis of the drivers, underlying causes and agents of deforestation and forest degradation. Also describe any policies and trends that could contribute to conservation and enhancement of carbon stocks. Please distinguish between both the drivers and trends within the boundaries of the proposed ER Program, and any drivers or trends that occur outside the boundaries but are affecting land use, land cover and carbon stocks within the proposed ER Program area. Draw on the analysis produced for your country's Readiness Preparation Proposal (R-PP) and/or Readiness Package (R-Package).

Drivers of deforestation

Zambézia is the fourth most deforested Province in Mozambique, as well as the most densely populated. It accounts for 13% of Mozambique's forest and 8% of its deforestation. The provincial economy is based in agriculture and forest resources, and 70,5% of the population is under the poverty line. In the seven districts that compose the ZILMP Program Area, approximately 90% of the population live in rural areas. The program area is located in the main zone of deforestation expansion in Zambézia. Among the 13th poorest districts of Mozambique that are in the government's list of priority, four (04) of them are located in ZILMP area.

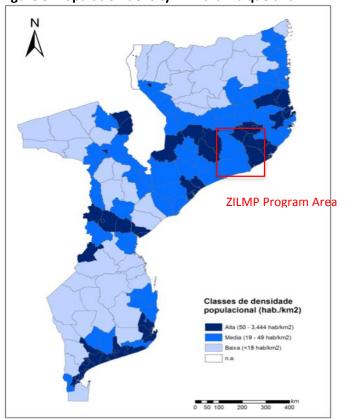


Figure 5: Population density in Mozambique and ZILMP Program Area

Source: Centro de Estudos de Agricultura e Recursos Naturais/Winrock (2015)

The major drivers of deforestation and forest degradation in the Program Area can be divided into direct and indirect drivers of deforestation:

Direct drivers: shifting cultivation, subsistence farming, agricultural expansion, removal of wood for domestic uses (e.g. fuel wood, charcoal production), logging (especially illegal), infrastructure expansion (e.g. mining), and uncontrolled fires, which contribute to major CO₂ emissions and other greenhouse gases. **Forest conversion into agriculture and unsustainable use of timber for biomass energy production are the main direct causes of deforestation**, while illegal logging leads to the degradation of native forest stands (particularly for export of valuable species to China).

Indirect drivers/ underlying causes: demand for export of timber and agricultural commodities (e.g. sesame seed and corn), demographic factors, in particular growth of urban population and the associated demand for agricultural products and charcoal, technological factors such as low agricultural **productivity**, **low production efficiency and use of vegetal charcoal and lack of viable alternative sources of energy**, and institutional factors, specifically low capacity, limited implementation and enforcement of laws and regulations.

There is a detailed study about the drivers, agents and underlying causes of deforestation in Mozambique being produced by Winrock and Centro de Estudos de Agricultura e Recursos Naturais that should be concluded by November 2015. Additionally, the GoM commissioned a specific study about the main drivers of deforestation in the ZILMP area with Etc Terra, which should also be concluded by Nov/15.

Nevertheless, the GoM has already identified certain areas that provide potential for GHG mitigation and to promote sustainable development in the ZILMP. Primary focus lies within:

- I. Developing low-carbon agricultural practices that reduce GHG emissions, particularly focused in subsistence crops (cassava, beans and corn) and cash crops (cashew, cassava and sesame);
- II. Reducing deforestation and wildfires by exploring forests in a sustainable manner, particularly focused in timber and firewood (sustainable management under forest concessions and plantation of woodlots) and non-timber forest products (honey, mushrooms and oils);
- III. Plan and manage the biodiversity of coastal ecosystems by developing sustainable management, regeneration and protection programs for the mangroves, algae and seaweeds associated with potential carbon capture and storage.

To support the implementation of the ZILMP, the GoM will also rely on two national programs:

- 1. The Strategic Plan for Agriculture Development (PEDSA, 2010-2019), recently drafted with the vision of promoting an integrated, prosperous, competitive and sustainable agriculture sector, and defined as one of its top 5 objectives "the use of land, water, forestry and fauna resources in a sustainable way".
- 2. The implementation of the New Forest Policy and the "Standing Forests Program" that will enormously strengthen the forestry sector in Mozambique, including sustainable management of native forests, commercial plantations and community forestry, combining international and domestic public and private investments (details presented in page 7 and also in Annex 1).

5.2 Assessment of the major barriers to REDD+

Please describe the major barriers that are currently preventing the drivers from being addressed, and/or preventing conservation and carbon stock enhancement from occurring.

In general, the main barriers to reducing deforestation in the program area are political, financial, institutional, and are mostly related to the unfavorable economic context that promotes social development based on "business as usual" agriculture and energy policies (like any other developing nation with vast natural resources). Specifically, the barriers can be structured as:

- Policy: despite recent improvements, there are still challenges in planning and implementation of policies and programs to promote forest conservation and low emissions development. Developing innovative models for forest conservation, low emissions agriculture and sustainable development demand substantial investments that generate results in the long term and compete directly with short-term social demands as education, health and infrastructure, which generally obtain higher political support and, therefore, may represent an indirect policies barriers.
- Financial: there is a lack of upfront financing to support the adoption of new agriculture, forestry and charcoal production methods that are expensive and not commonly adopted as business as usual in the region. Enabling investments are also needed to increase capacity, promote knowledge exchange and attract responsible businesses from the private sector and institutions committed to sustainable forestry production and deforestation free agriculture supply chains.
- Institutional: there is weak inter-institutional and sectoral collaboration in the program area, and this tends to favor illegal logging and unplanned land occupation. The lack of coordination among different sectors (environment, land, agriculture, energy, education, etc.) and levels (national, provincial and districts) is the main barrier for a comprehensive land zoning and planning process that is essential for controlling deforestation in Zambézia. There is also a lack of strong community-based organizations that are essential to coordinate on the ground activities.

An additional challenge relies on land zoning, planning and tenure rights. The program will coordinate with other development partners working on land issues, such as the United Kingdom, the Netherlands and Sweden. This is fundamental to improve our capacity for long-term land planning and zoning.

Regarding measurement, reporting and verification (MRV), Mozambique has achieved substantial developments through the creation of MITADER and the partnership with JICA. There is significant capacity at various levels (see Item 9) and the main challenge is enhancing coordination among institutions. To reduce transaction costs and allow more efficient planning of MRV, a database and MRV system will be created. There is still lack of data on density biomass of carbon and emission factors, lack of spatial coverage and details, which should be enhanced with the additional funding from FCPF for 2015-2018.

5.3 Description and justification of planned and ongoing activities under the proposed ER ProgramPlease describe the proposed activities and policy interventions under the proposed ER Program, including those related to governance, and justify how these activities will address the drivers and underlying causes of deforestation and forest degradation and/or support carbon stock enhancement trends, to help overcome the barriers identified above (i.e., how will the ER Program contribute to reversing current less sustainable resource use and/or policy patterns?)

The ZILMP will be based on an "integrated landscape management" approach recognizing that agriculture development, natural resource management, and governance are inextricably linked, both institutionally and at the local technical level, and that interventions need to be made at scale to have an impact on rural poverty and natural resources sustainability. The proposed Program's integrated approach aims to address the drivers of deforestation and degradation while generating rural development benefits by combining land-based economic activities with the management and conservation of natural resources.

In order to enable these interventions, and to overcome deforestation drivers and the barriers described in earlier sections, the ZILMP will aim to strengthen governance in the forests and agricultural sectors, improve capacity of land administration systems, and promote markets to encourage farmers to invest in their land. The landscape approach will target an integrated territorial planning process, create an enabling environment through appropriate policy interventions at the jurisdictional level, and involve stakeholders across sectors in this concerted effort to achieve sustainable resource management.

Additionally, Mozambique is seeking to integrate different financial streams to sustainably generate ERs in the long term. A significant part of the program activities will be implemented using resources from the Forest Investment Program (FIP), which will provide much-needed investment financing for the implementation of structural reforms envisaged by the government at national level, and the implementation of integrated landscape programs such as the ZILMP. The FIP resources will be used to address deforestation through actions that bring tangible benefits to communities. The allocation of the FIP resources will be decided in a participatory process (further detailed at item 7.4) through an investment planning process planned to happen in the second semester of 2015. They will be fully aligned with national REDD+ process, and complement the institutional support currently received from FCPF, JICA, and other World Bank projects.

The ZILMP will be implemented through a cooperative approach combining policies, programs and actions across different levels of the government (national, provincial and districts) and multiple stakeholders (government, farmers, communities, private sector, NGOs, etc.) to maximize funds and institutional capacity. Therefore, we will combine "command-and-control" policies for land use, with "positive incentives" such as access to public funds conditioned on deforestation rates, and incentives for the adoption of sustainable production systems. The GoM is also investing significant resources in

strengthening the districts government capacities through the "7 million Program" that allocates nearly US\$ 200,000 every year to the districts budgets for their local development plans.

The following crosscutting interventions in Table 5 illustrate how ongoing and planned efforts will address the main drivers, causes and agents of deforestation in the ZILMP while promoting important social, economic and environmental benefits:

Figure 6: ZILMP proposed interventions for the first 5 years of the Program

lain Drivers	ZILMP Program	Activities/Interventions
		Design and coordination of the ER Program
		Strategic studies and program preparation (FRELs, ERPIN, ERPD, etc.)
	A. Developing Coordination and Monitoring	Coordination/operational infrastructure (staff, office, vehicles, equipment, etc.) Create online forest platform to increase transparency in forest sector
		Creation and maintenance of Zambézia' s Provincial REDD+ Forum
eak governance, ck of organized		Capacity building, consultations and communications
ocess for cognizing land		District land planning and law enforcement/control of illegal activities
nure and zoning, wincome and poor		Implementation of "green development plans" at the 7 ZILMP Districts
cial conditions,	B. Land Planning, Law Enforcement	Creation of Land Registry and registration of community areas and individual farms Law enforcement, monitoring & control of illegal activities (timber, deforestation etc.)
	and Governance	Management of Gilé National Reserve
		Improve Gilé National Reserve infrastructure, staff and equipment
		Improve sustainable tourism GNR
		Implement private and community game hunting area
		Conservation agriculture and cash crops
		Implementation of agriculture conservation practices in community and farm level
		Implementation of sustainable cash crops (sesame, cashew, beans, etc.) Exchange with other successful initiatives (south-south to Zambia, Zimbabwe, Bra etc.)
		Market information platform to support fair trade in the communities
ting cultivation, sistence farming,		Structuring of key sustainable supply chains for cash crops (cashew, sesame, man
icultural	C. Sustainable production,	Small fund for sustainable enterprises (ex: cashew industry, cassava processing, etc
ansion, removal vood for domestic	livelihoods and	Storage and marketing in the farms and communities (ex: sesame, beans)
s, illegal logging,	income generation	Sustainable forest management
		Strengthening of 28 Natural Resources Management Committees
		Structuring of key NTFP projects (honey, mushroom, handcraft, etc.)
		Support to increase development of forest concessions under FSC
		Forest Plantations
		Establish 50,000 hectares of forest plantations (including out grower schemes)
		Create 15 community forest nurseries
ck of community		Community awareness and capacity building
anization and gagement, low ess to energy, lack	D. Community strengthening, social development	Workshops, trainings, meetings and communications about ZILMP and REDD+ Engage and finance civil society organizations through projects and initiatives (FDGM)
individual wood plantations,	and energy supply	Improving access to energy
gal logging and		Distribution of improved cook stoves "poupa-lenha"

inefficient cookstoves and charcoal plants. Etc.

Distribution of improved cook stoves charcoal
Implementation of community woodlots
Projects for Community Charcoal kilns
Social improvements and housing
Construction of banks (Gilé, Mocubela, Mulevala, Ile, Pebane)
Water supply systems (1 district and 28 community level)
Research and Development
Support to research projects
Organization and participation in workshops and congresses

These activities will be continuously revised and planned on a participatory manner. There are also some successful interventions that were already tested by the GoM, NGOs and other partners in the program area and will be replicated, such as:

- Conservation agriculture and green supply chains can generate income diversification among communities through the promotion of various crops. Integrating smallholder farmers into supply chains for local, regional and global markets of attractive crops could improve their livelihoods significantly by generating income and enhancing their access to markets. It would also reduce their practice of slash and burn agriculture as improved agricultural techniques would enhance soil conservation and increase crops productivity with the maximization of environmental services (involving the quality and quantity of water for various uses, including irrigation and energy generation).
- ➤ Cashew and Sesame Agroindustry: a new social-business dedicated to agro-processing is in the process of being launched in the ZILMP area. It will be focused initially on cashew processing and, in a second time, on sesame, the two main cash sources in the area representing more than 50% of the small-holder's income. The cashew-processing unit will be based in Alto-Molocué and will consist of a semi-automatic processing plant with an installed transformation capacity of 5,000 tons of raw cashew nut, employing 600 workers at full capacity. The unit will be designed to deliver high environmental performance. In particular, a pyrolysis system will be set up to convert cashew shell into energy without producing the pollution of a classical cashew-processing unit. Besides organic & fair-trade labels, cashew kernels will be sold as 'low-deforestation'. International buyers from Norway and France are already interested.
- Promotion of energy efficiency in sustainable charcoal production through the dissemination of improved biomass-making kilns across local communities could decrease deforestation and generate significant social, economic and health benefits. Most of the charcoal in Mozambique is produced by using traditional earth kilns, which are inefficient and seldom allows for the achievement of a wood-to-charcoal conversion rate of more than 15%. They also cause extensive local degradation and soil erosion due to the intense heat generated, as well as deforestation related to the clear-cutting of trees and kiln construction.
- ➤ Forest certification schemes or acquisition of efficient technologies for wood processing and production of higher value added products could also contribute to the increase in revenues and profits for local communities. The forest legislation provides logging incentives for forest operators producing added-value products. Yet, they require further support to be able to access these benefits. Related activities could also help to promote more private and community-led sustainable logging for international and domestic markets, protection of high conservation value forests for environmental services and tourism, and harvesting of non-timber forest products for niche markets (such as fruit oils, art products, mushrooms and honey, particularly if certified as fair trade or organic).

5.4 Risk/benefit analysis of the planned actions and interventions under the ER Program

Please explain the choice and prioritization of the planned actions and interventions under the ER Program identified in 5.3 taking into account the implementation risks of the activities and their potential benefits, both in terms of emission reductions and other non-carbon benefits.

Implementation Risks

The actions and interventions proposed will require a high level of coordination and management, both external to the Program (for example, among the various levels of Government programs, and other institutions) and internally (with stakeholders and within the implementation team). The activities are focused on fostering and coordinating political and institutional change that will generate the enabling conditions needed to add value and increase the sustainable use of the forests, and on generating the capacities and linkages between communities, local farmers, financial institutions and markets. These two types of activities will operate hand in hand and will mutually reinforce each other.

There are three types of risks that could affect the implementation of the program and the results-based payments: (i) political/institutional, (ii) social, and (iii) operational. A brief description of the risks in each category and how they might be mitigated follows.

Table 5: Implementation risks and its mitigation measures.

Implementation/Political Risks	Level of Risk	Mitigation Measures
Capacity constrains: insufficient human resources at both national and local level	Medium	Increase staff, include other gov. agencies, tap into other partners' capacity, decentralize governance
Up front finance to implement activities is not mobilized	Medium	Pro-actively look for other sources of finance, establish a resource mobilization strategy, and continue dialogue with local partners
Political stability/ commitment: change in government at national, regional and local level	Low	Create a legal framework that ensures the program continues beyond the government term
Extreme climate events: hampers access to local communities, such as floods.	Low	Build early warning system into project preparation
Infrastructure development: Mining/ Big commercial agriculture projects/ Roads.	Low	Establishment and empowerment of cross-sectoral board that takes into consideration REDD+ activities

Ensuring multiple benefits of forests and REDD+ is essential for the success of the landscapes program. Any REDD+ actions will need to be consistent with enhanced ecosystem and other social and environmental benefits. Other operational risks can be reduced by the implementation of an effective program of capacity building at multiple levels (institutions, indigenous communities, producers, businesses, or organizations), assuring the participation and consultation of stakeholders, using a gender-responsive and youth-inclusive approach, and the design and implementation of an effective program monitoring system that would enable the identification of problems and their mid-course correction. With regards to risks related to land use and land rights, during the program preparation phase, regional socio-environmental assessments focusing on each area of intervention and its sphere of influence (direct and indirect) will be carried out.

6. Stakeholder Information Sharing, Consultation, and Participation

7.5 Stakeholder engagement to date on the proposed ER Program

Potential next steps to address them.

On a national level, the R-PP is a product of consultations undertaken at national and provincial levels. This involved particularly attention to the provinces of Niassa, Nampula, Tete, Zambézia, Maputo and Gaza, where forests are under more pressure. Representatives of all districts were invited to the provincial level consultations. The process was undertaken between February 2010 and July 2011, and included more than 1.500 registered participants in both consultation and the four training workshops, representing government (national, provincial, district and local authorities), NGOs, academia, private sector (timber concessionaires and simple license operators, plantations and agriculture), community leaders, women's organizations, forest guards, religious organizations, traditional healers, farmers, agriculture associations, charcoal producers, teachers, students, development partners and others. Consultations included dissemination of information on REDD+, discussion on reference level scenarios and MRV system, legal and institutional opportunities and gaps, identification of drivers of deforestation and degradation in the covered provinces, actions to address them, and identification of potential pilot projects.

Provincial outreach efforts in Zambézia were intensified in the first semester of 2015, in which representatives from UT-REDD+ conducted a range of meetings at the district and Province level to assist the identification of districts and to initiate discussions with provincial level government on the potential scope and objectives of the proposed ER Program. Meetings were held in Quelimane, Mocuba, Maganja da Costa, Mocubela, Pebane, Malema and included visits to key stakeholders such as local producers, cashew nurseries, farm schools to discuss and get feedback on causes of deforestation in the area, with a focus on shifting cultivation, settlements and logging and potential opportunities for REDD+ activities.

In Quelimane, the team also met with Provincial Director of Environmental Affairs, the head of the Provincial Services of Forestry and Wildlife, Provincial Director of Agriculture, Services Agricultural Extension, Provincial Delegate of the National Statistics Institute (INE) and the Deputy Chief of Rural Extension Services, to discuss current and future district planning, the database for Zambézia population, information on the activities of forest concessions and licenses and simple maps, all with the aim to assess and emphasize importance of planning for Integrated Program Landscapes Management.

The consultations for the Strategic Environmental and Social Assessment (SESA) and subsequent design of Environmental and Social Management Framework (ESMF) are being held all across Mozambique, and more specifically in the program area. The initial consultations for the program implementation started in May 2015. These consultations were conducted to inform and consult on the National REDD+ Strategy and thus not for the ER Program in itself, yet provided information on REDD+ and collected important information. During the exploratory stage, the SESA Consultant's team (Scott Wilson) conducted informal interviews with communities in the area to gather further information to understand the situation of the forest sector and the potential implications arising from the implementation of future REDD+ projects. Discussions were also held with government and non-governmental organization representatives relevant for the forest sector. These preliminary field visits aimed to clarify the target groups, prepare the target groups through awareness rising on REDD+ and the upcoming consultation process, set up the definitive consultation dates/days and define the logistics and other fieldwork requirements.

In addition, two community consultations were held in Gile and in Pebane in the Namarrua and Mucela communities in the buffer zone around the Gile National Reserve. The consultations at community level were conducted by means of Focus Group Discussion (FGD) comprising of 15 to 20 people each,

approximately. The targeted demographic groups included youth (15-35 year), adult (36-55 years) and elderly (more than 56 years). The consultations with communities were designed to broadly explore issues around the drivers of deforestation and forest degradation, land use and land tenure, social and environmental protection and sustainable forest management.

Provincial workshops for SESA were also held in Zambézia, and involved representatives of relevant institutions for REDD+ such as government entities, private sector, civil society organizations, and academic institutions. The workshops aimed to undertake a joint assessment of potential socioeconomic and environmental impacts of REDD+ and preliminary identifications of mitigation measures and strategies. Equally, the workshops explored broader issues relating to forest governance and institutional arrangements and its implications for REDD+. The workshops combined an integrated approach discussion groups and plenary sessions. The discussion groups were established based on the institutions each participant represented and these included government institutions, civil society, and private sector and academic institutions. While the working groups explored sector knowledge of the issues under discussion, the plenary discussion served as the platform to broaden the discussion, compare and contrast views across groups with different interest in the forest sector.

To supplement findings from community consultations and provincial workshops, the interviews with key informants were conducted with representatives of relevant institutions both at provincial and district levels. These interviews targeted institutions such as District Administration; Courts; Police; District Services for Economic Activities (SDAE); Environmental Provincial Directorate; Forest Provincial Directorate; Private sector (Anadarko, ENI and Forest Operators) and Forest and Environmental NGOs. The interviews explored specific forest matters to the institutions in order to identify its implication for the future of REDD+ in Mozambique.

6.2 Planned outreach and consultation process

Please describe how relevant stakeholder groups will participate in further design and implementation of the proposed ER Program and how free, prior and informed consultation leading to broad community support for the ER Program and key associated features, including the benefit-sharing arrangement, will be ensured. Please describe how this process will respect the knowledge and rights of Indigenous Peoples and local communities, by taking into account relevant international obligations, national circumstances and laws.

Preparation and implementation of the ZILMP will include extensive consultations among key stakeholders such as government agencies, civil society, private sector, local communities, and development partners. UT-REDD+ will lead the consultation process in collaboration with local NGOs, to ensure acceptance and interest in the program, as well as to build the trust of stakeholders and support their capacity to participate in REDD+ in a meaningful and effective way.

In the design phase of the ERP, consultations for the ZILMP are being led by UT-REDD+ in coordination with provincial and district governments, and also local associations and Natural Resources Management Committees', taking advantage of the processes needed for the National REDD+ Strategy and the FIP Investment Plan. Technical communication of UT-REDD+ will range from mass communication techniques through media including Radio (national and Community), TV, Newspapers, WhatsApp, the UT-REDD+ web page, Facebook to more focused community consultations. Public consultations about the ER Program will increase during the course of the work around developing the ER-PD and implementing the first pilot activities. A team of consultants will prepare a draft work plan in the end of 2015, for the ZILMP implementation, and the proposal will be used as a basis to discuss and test and collect contributions from all relevant stakeholders on the options, objectives, and strategic actions proposed by the ZILMP. UT-REDD has also hired a Focal Point based in Quelimane who will be following closely the work of consultations.

To widely disseminate and consult the communities in the districts of the ER Program area, UT-REDD+ has planned 8 community consultations, one on a provincial level in Quelimane and one in each of the seven districts as showcased in the table below. The community consultations will be done in a collaborative manner, following methodologies used during the community consultations done for the SESA and the national REDD+ Strategy. The community consultations will include presentations and discussions with community members so as to ensure that their input to program activities is taken into account. Discussions will focus on trade-offs, costs (including opportunity costs), and benefits at various scales such as enhancing the multiple benefits of REDD+, including the conservation of forest biodiversity, water regulation, soil conservation, timber, forest foods and other non-timber forest products.

The UT-REDD safeguards team will play an active role in planning and delivering the consultations in order to provide communities with extensive information on social and environmental safeguards, benefit sharing mechanisms and grievance mechanisms. The consultations will also include information about the Forest Investment Program (FIP), Mozbio (a current World Bank project working on protected areas), the FIP DGM and other relevant information about additional funding sources/projects.

Table 6: schedule of consultations for the ZILMP during the ER-PD elaboration

Date	Location/Districts	Stakeholders	Methods	Approx. Target stakeholders consulted
September, 2015	Quelimane	Government, Private Sector, Civil Society representatives from the Provincial level	Presentation and distribution of material, focus group discussions and interviews.	200
November, 2015	Pebane, Gilé, Maganja da Costa	Government, Private Sector, Civil Society representatives from the District levels and communities	Presentation and distribution of material, focus group discussions and interviews with community members.	700
December, 2015	Alto Mulocue, Ile, Mucubela, Mulevala	Government, Private Sector, Civil Society representatives from the District levels and communities	Presentation and distribution of material, focus group discussions and interviews with community members.	900

7. Operational and financial planning

7.5 Institutional arrangements

Please describe the governance arrangements anticipated or in place to manage the proposed ER Program (committee, task force), and the institutional arrangements among ER Program stakeholders (i.e., who participates in this ER Program, and how, including the roles of civil society organizations and forest dependent communities).

The governance and implementation of the ZILMP by GoM will be based in three levels:

- 1. National level: Responsibilities to raise investments and funds, enter into agreements and ensure compliance with donors and partners, technical and administrative management of the program, transfer of funds to districts and implementation agencies, coordination of main processes and procedures and continuous evaluation and monitoring of the program.
 - ➤ Institutions involved: MITADER, Ministry of Finance, Ministry of Agriculture and Food Security, Bank of Mozambique, World Bank and the National Steering Committee CTR.

- 2. **Provincial level:** Responsibilities for coordination within the province and districts between different actors; receive funds from the central level; ensure compliance with the norms, standards program; at project level the transfer of resources within the program;
 - ➤ Institutions involved: Provincial Directorate of Environment, Provincial Government, Commercial Banks of micro-credit institutions, NGO's and Provincial Forum of REDD+.
- 3. District level: the districts will be the basis for the program implementation. Each district will represent one administrative/implementation area, where the ZILMP will plan different REDD+ activities according to their main needs. There are several NGOs and private sector with good capacity and know-how in the Zambézia province. The project activities will be held in communities, involving the management committees of natural resources, individual farmers and small community businesses. Monitoring of activities will be made by the District Government through the SDAE and SDPI.
 - ➤ Institutions involved: District Governments, District Councils, Natural Resources Management Committees (CMRN), Community Associations, Private Sector (forest operators, medium-scale farmers, input suppliers), NGOs and Research/Academia (ADRA, Etc Terra, IIED, IGF, ITC, ORAM, PRODEZA, RADEZA, among others).

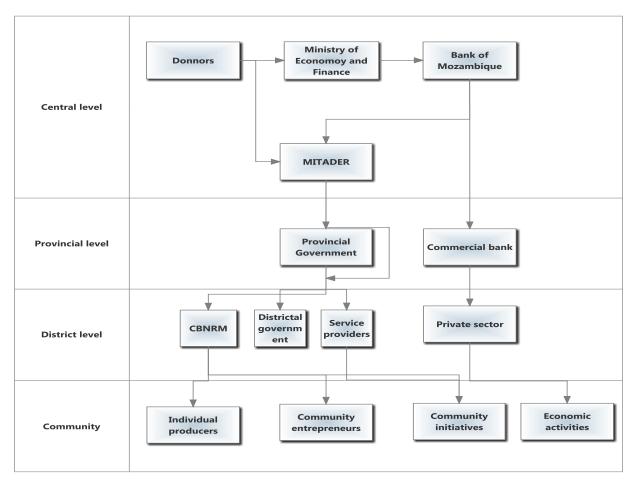


Figure 1. Institutional arrangements for implementation of the Program

7.2 Linking institutional arrangements to national REDD+ implementation framework

Please describe how the institutional arrangements for the proposed ER Program fit within the national REDD+ implementation framework.

Implementation of the ZILMP will be embedded in the ongoing REDD+ process, which was initiated in 2008 under the joint leadership of the previous Ministry of the Coordination of Environmental Affairs (MICOA) and the Ministry of Agriculture (MINAG) / Directorate National of Land and Forestry (DNTF), current MITADER. The national implementation framework is currently being formulated by the UT-REDD+ as part of the overall readiness activities and the FIP Project.

The ZILMP will be aligned with the National REDD+'s overall objectives and strategy, and will include specific cooperation agreements with the provincial government of Zambézia, District Administrations, and local stakeholders from civil society and the private sector. UT-REDD+ has hired in June 2015 a provincial coordinator to carry on the preparation, consultation process and implementation of the program's early activities between 2015 and 2016. The I Provincial REDD+ Forum will be a key link for local institutions and stakeholders and the national REDD+ processes. UT-REDD+ also plans to elaborate and sign a collective Memorandum of Understanding (MoU) with the key institutions that will be involved with the program implementation.

7.3 Capacity of the agencies and organizations involved in implementing the proposed ER Program

Please discuss how the partner agencies and organizations identified in section 3.1 have the capacity (both technical and financial) to implement the proposed ER Program

Capacity for Implementation: Besides the existing financial administration directorates within the Ministries, both MITADER and MASA have a long experience of implementing World Bank and other complex multi-donor funded projects and have adequate institutional and technical capacity to effectively absorb additional funds and implement the ZILMP. There are established financially autonomous public institutions to help manage environmental and agrarian development projects. The MITADER has within its structure the Mozambican Environment Fund (FUNAB), which was established in 2000 and its mission is to generate and mobilize resources to fund environmental initiatives in the areas of promotion of clean technology, environmental management and response to environmental disasters. FUNAB is currently the main vehicle for the management of the REDD+ Readiness funds provided by FCPF. The JICA funded project has helped to build the institutional capacity, by providing training to over 35 technicians at the Provincial and National levels in Remote Sensing and Carbon Stock Measuring. MITADER and MASA have significant capacity on the ground. For the implementation of most of the "on the ground" activities the program will rely on the coordination and contract of renowned technical institutions that have good track record in Mozambique such as ADRA, IGF, ITC, ORAM, PRODEZA, RADEZA, T-REDD+ among others.

<u>Multi-sectoral coordination</u>: The highest governmental structure to discuss and communicate with the Council of Ministers issues related with environmental and sustainable development in Mozambique is the Council of Sustainable Development (CONDES). CONDES is presided by the Prime Minister and the Minister of MITADER. This vehicle will also help to support the inter-institutional coordination of REDD+.

<u>Donor coordination:</u> Development Partners (DP) active in the field of the environment agreed to meet on a monthly basis to share information and to participate in policy dialogues. This initiative led to the creation of the Donor Working Group on Environment as a platform for dialogue bringing together the previous Ministry for the Coordination of Environmental Action (MICOA) and other government institutions, together with development partners (DP), civil society and the private sector. The group has been instrumental to the integration of the environmental agenda into the current Action Plan for the Reduction of Absolute Poverty.

Despite this existing capacity, challenges remain such as overlap of mandates across institutions leading to inefficient allocation of financial and human resources, lack of integration of actions between institutions, which results in inefficient law enforcement, a concrete case being the persistence of illegal activities in the forestry and wildlife areas in the country facilitated by unethical behaviour of official authorities. Addressing these institutional challenges is critical, and the new institutional framework with MITADER proposed by new government presents an important window of opportunity.

7.4 Next steps to finalize the proposed ER Program implementation design (REL/FRL, ER Program monitoring system, financing, governance, etc.). Provide a rough timeline for these steps.

The next steps necessary to initiate the design of the ER-PD and complete the REDD+ Readiness Package include the following:

- Design and implement the stakeholder engagement plan and the training component, in order to
 ensure effective participation and the inclusion of civil society in the final design and implementation
 of the ERPD.
- Create the ER-PD Executive Committee (ERPD-EC) at the national level and design a work plan for institutional and policy linkage and coordination among all relevant members and stakeholders
- Define in detail with the provincial and district governments, UT-REDD+, business sector, and civil society the composition of the ERPD-EC, and begin to jointly design the interventions and implementation plans for each zone/district of the program.
- Elaborate and validate the Zambézia Integrated Landscapes Management Program (ZILMP) Emission Reductions Program Document (ER-PD)
- Consolidate the National REDD+ Strategy and linkages with ZILMP
- Initiate discussions around possible issues, challenges and opportunities around integration of ZILMP into the National REDD+ System, in order to avoid double accounting of emission reductions or any inconsistencies with the national GHG inventories
- Complete the design of the SESA and adapt it to the ER Program interventions, including the plan for tracking the indicators of both the safeguards and the non-carbon benefits and the plan for including and managing of these data in the National REDD+ Registry.

These steps will require approximately 18-24 months to complete (generally, second semester of 2014 – first semester of 2016) (Table 7).

Table 7: Estimated chronogram for finalization of ERP design

Activity	Deadline for execution
Finalization of SESA and safeguards instruments in Zambézia	Dec/15
Consolidate National REDD+ Strategy (NRS)	Jan/16
Create ER-PD Executive Committee (ERPD-EC) and consultations	Jan/16
Finalize strategic studies in ZILMP (legal frameworks, drivers, etc.)	Mar/16
Implementation of stakeholder engagement plan and all relevant consultations	June/16
Define strategies for nesting ZILMP in NRS	Sept/16
Elaboration and submission of ZILMP ER-PD to FCPF Carbon Fund	Dec/16

7.5 Financing plan (in US\$ million)

Please describe the financial arrangements of the proposed ER program including potential sources of funding. This should include both near-term start-up cost and long-term financing. If the proposed ER program builds on existing projects or programs that are financed through donors or multilateral development banks, provide details of these projects or programs, including their financing timeframe. Use the table in Annex I to provide a summary of the preliminary financial plan

The initial costs and current sources of financing for the program implementation in the first five years of the ZILMP are presented in Annex 1. Table 8 below presents a resume of total expected costs and revenues for the program implementation between 2016 and 2020. The total ZILMP implementation costs for the initial period are estimated in approximately US\$ 44,4 million. All investments already committed by the GoM and donors like FCPF and FIP sum up to US\$ 21,6 million; if the program succeeds in generating and selling the expected Ers another U\$ 29,1 million will be generated totaling U\$ 50,7 million in revenues. Therefore, there is possible balance/surplus of U\$ 6,2 million up to 2020.

Table 8: ZILMP expected budget for the first 5 years of the program (2016-2020)

Program	2015/2016	2017	2018	2019	2020	Total	Existing Funds	Gap
Development Coordination and Monitoring	5,714,000.00	1,488,000.00	1,488,000.00	1,338,000.00	1,488,000.00	11,516,000.00	7,790,000.00	(3,726,000.00)
Land Planning, law enforcement								
and governance	1,565,000.00	3,145,000.00	2,650,000.00	2,650,000.00	225,001.00	10,235,001.00	5,260,000.00	(4,975,001.00)
Sustainable production, livelihood, and								
income generation	1,105,000.00	5,570,000.00	2,960,000.00	2,500,000.00	2,350,000.00	14,485,000.00	2,310,000.00	(12,175,000.00)
Community strengthening, social								
development and supply	400,000.00	3,120,000.00	2,432,500.00	1,044,500.00	587,500.00	7,584,500.00	6,257,500.0	(1,327,000.00)
Total	\$8,784,000.00	13,323,000.00	9,530,500.00	7,532,500.00	4,650,501.00	43,820,501.00	21,617,500.00	(22,203,001.00)

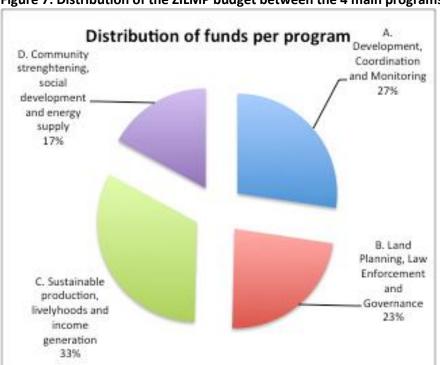


Figure 7: Distribution of the ZILMP budget between the 4 main programs

The FCPF, FCPF-AF, Mozbio, FIP and other World Bank and government projects will provide the much-needed investment financing for the preparation and implementation of structural reforms envisaged by the government, as well as for the preparation implementation of the Zambézia Integrated Landscape Program (ZILMP); which are expected to result in sectoral transformation and pave the way for reduced GHG emissions. A significant part of the funds will come from FIP and Mozbio to address the direct and indirect drivers of deforestation through actions that bring tangible benefits to communities. They will be fully aligned with the ongoing REDD+ process, and complement the institutional support currently received from FCPF and other donors. The allocation of the FIP resources will be decided in a participatory fashion through the investment planning process, hence, this section should be read as preliminary options from the Government.

8. Reference Level and Expected Emission Reductions

8.1 Approach for establishing the Reference Emission Level (REL) and/or Forest Reference Level (FRL)

Please briefly describe how the REL/FRL for the proposed ER Program has been or will be established. Describe how the approach for establishing the REL/FRL is consistent with UNFCCC guidance available to date and with the emerging Methodological Framework of the FCPF Carbon Fund, and with the (emerging) national REL/FRL (or with the national approach for establishing the REL/FRL).

The preliminary reference emissions level for the ZILMP was estimated based on the continuation of average historic deforestation rates in the program area, using a combination of local and default data for the estimation of carbon stocks and emissions factors.

The reference period considered for the calculation of the historic average deforestation was 2001 to 2013. The annual deforestation rates during this period were obtained from Hansen et al (2013)³ that estimated annual deforestation for the entire Zambézia Province classifying Landsat Images.

The emission factor (EF – expressed in tCo2 equivalent per hectare) used to determine the amount of greenhouse house gases released to the atmosphere from deforestation, was estimated combining default data from IPCC (2003)⁴ and primary data extracted from local studies around the program area. Etc Terra (2014)⁵ calculated above-ground biomass (AGB) on the basis of raw data from a forest inventory conducted in the Gilé National Reserve by Thomas Prin⁶ in 2008. Below-ground biomass was calculated using IPCC shoot-to-root ratio. Soil carbon content (SOC) was calculated on the basis of the ratio between AGB and SOC estimated by Williams (2008)⁷ for Miombo woodlands.

This is considered an appropriate and conservative estimation for emissions resulting from conversion of Miombo forests to small-scale agriculture in the Zambézia region. Nevertheless, a thorough forest and soil carbon inventory is currently being conducted in the program area by Etc Terra to generate more accurate emissions factors and activity data.

The only vegetation type included in the FREL so far is the Miombo forests, since they are the only forest type being deforested in the program area. The Government of Mozambique will also implement a National Forest Inventory in 2016 including all forests in the country, and this will help to improve significantly biomass, carbon stocks and emission factor estimations for the ZILMP. We also expect to improve the FRELs calculations when the program moves towards the elaboration of an ER-PD. Nevertheless, this current approach is considered sufficiently conservative and consistent with current UNFCCC guidance and the FCPF Methodological Framework.

Mozambique is working on the construction of a national REL/FRL. Therefore, the technical team of MITADER expects to build capacity and develop a national FREL based on experience and information generated by subnational jurisdictional programs as this one in Zambézia, using a "step-wise approach" consistent with Decision 1/CP.16, Decision 12/CP. 17 and Decision 19/CP. 19. This highlights the importance of the Zambézia Program towards the construction of a national FREL in Mozambique.

8.2 Expected REL/FRL for the ER Program

Please provide an estimate of the REL/FRL for the proposed ER Program area. Even a very preliminary estimate would be helpful.

The FREL was calculated based on the annual average deforestation rate between 2001 and 2013 (17,101.82 ha/year) multiplied by a default emission factor of 227.1 tCo2/ha for any given year between 2015 and 2022 (see table 9 below).

³ Hansen, M. C., P. V. Potapov, R. Moore, M. Hancher, S. A. Turubanova, A. Tyukavina, D. Thau, et al. 2013. « High-Resolution Global Maps of 21st-Century Forest Cover Change ». Science 342 (6160): 850 - 53

⁴ IPCC. 2003. « Forest Land ». Good practice guidance on land use, land-use change and forestry.

⁵ Etc Terra. 2014. Projet pilote de lutte contre la déforestation et la dégradation de la forêt de Miombo dans la Réserve Nationale de Gilé et sa périphérie - Rapport d'activités du premier semestre 2014.

⁶ Prin, Thomas. 2008. Typologie de la végétation de la Réserve Nationale de Gilé : étude préalable à la réintroduction de grands mammifères.

⁷ Williams, M., C. M. Ryan, R. M. Rees, E. Sambane, J. Fernando, et J. Grace. 2008. « Carbon sequestration and biodiversity of regrowing Miombo woodlands in Mozambique ». For Ecol Manage 254: 145 - 155.

Table 9. Forest Reference Emissions Level (FREL) for Zambézia Program

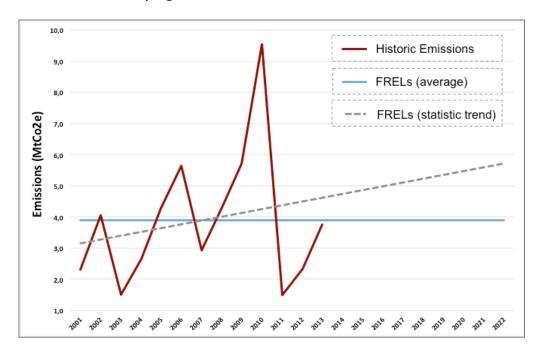
Program Area - Districts	Total Forest Area (ha)	Average Def. Rate 2001-13 (ha/yr)	Average Def. Rate 2001-13 (%/year)	Emissions Factor (tCO2e/ha)	FRELs (t CO2e/yr)
Alto Molocué	331.595	3.727	0,98%	227,14	846.541
Gilé	618.190	3.729	0,56%	227,14	846.996
Ile	104.828	1.811	1,41%	227,14	411.346
Maganja da Costa	137.474	950	0,63%	227,14	215.781
Mocubela	348.979	1.526	0,41%	227,14	346.612
Mulevala	122.096	1.233	0,89%	227,14	280.061
Pebane	639.135	4.125	0,60%	227,14	936.942
Total	2.302.297,00	17.101,00	0,78%	227,14	3.884.278,39

It should be noticed that forest degradation was not estimated due to the lack of data at the program start date. We expect to carry on a broad and consistent assessment of deforestation and forest degradation emission factors after the project start, upon availability of funds generated by the program implementation. In addition, we have not accounted the potential of ERs that could be generated by afforestation and reforestation activities due to a lack of accurate data at his moment. However, we expect to have more concrete data for the ER-PD.

It is also expected to refine activity data and studies about deforestation in the program region. Although not for the FCPF Carbon Fund consideration, various factors suggest that an upward adjustment in the historical reference level may be justified, such as:

- There is a statistic growth trend in deforestation (mainly between 2006-2011) that is not "captured" using the "simple average" of annual deforestation (see Figure 3)
- Political stability is attracting increasing investments in agriculture and infrastructure
- There is clear trend in population growth that is not fully contemplated in deforestation rates and indicates an increasing trend in pressure on forests for agriculture land

Figure 8: Estimation of the FREL based in two different methods: "simple average" and "statistic trend" of annual deforestation in the program area between 2001 and 2013



9. Forest Monitoring System

9.1 Description of approach and capacity for measurement and reporting on ERs

Please describe the proposed approach for monitoring and reporting the emission reductions attributable to the proposed ER Program, including the capacity of the proposed ER Program entities to implement this approach.

The Government of Mozambique is continuously improving its capacity for measuring, reporting and verification (MRV) for REDD+. The following tasks are currently underway to build the national MRV system; (1) establishment of a Forest Resource Information Platform (to serve as National Registry), (2) build GIS monitoring system to detect land use/land cover change and carbon stocks, and (3) develop on the ground monitoring system. The ZILMP will use the National MRV that is current under preparation.

There are still critical milestones to be achieved for full capacity to measure and verify the success of REDD+ at national level. In that sense, Mozambique will build its MRV System based on the coordination of existing institutional capacities at different levels, implemented by key partners and stakeholders – see Table 10. The ZILMP will also strengthen provincial and local institutions and government staff on key MRV activities, generating local capacity for continued implementation of the program.

Table 10: Institutional capacity for MRV that will be used to the Zambézia Program

Institution		Technical capacity related to MRV		
MITADER ——	National Department of Forests (DNF)	The Department of Forests (DNF) is responsible for conducting national inventories at national scale as well as provincial and regional level; processing and analysis of satellite imagery on forest cover, definition of forest use categorie and production of forest maps. The CDS-ZC develops applied research or integrated management of coastal resources including coastal forests and mangroves, and has high capacity of analysis and processing of satellite image and production of land use maps and changes that occur along the cost.		
	Centre for Sustainable Development in Coastal Zones (CDS-ZC)			
	National Center for Cartography and Detection (CENACARTA)	Satellite images, cartography, tele detection. High capacity to process and distribute the images, produce land cover and land use maps, including changes.		
	National Directorate of Geography and Cadaster (DINAGECA)	National registry of land occupation. Management of land information system maintains databases of land use certificates (DUAT) and other recognized forms of land use rights. Operations at provincial level are undertaken by the Services of Geography and Registry (SPGC) which collects geo-referenced data in the field and registers land occupation.		
MASA	National Institute for Agriculture Research (IIAM)	The National Institute for Agriculture Research has a Department of Land and Water, equipped with human capacity and materials for soil analysis. This capacity can be used to assess change of carbon stocks as result of current uses and adoption of REDD+ activities.		
Department of Forestry of Eduardo Mondlane University - UEM-FAEF-DEF		Research on various forest issues including remote sensing and photography to assess vegetation, changes in forest cover, forest degrad change of species composition, assessment of forest biomass and stocks of c in the forest ecosystems. UEM also offers training to institutions at national local level, including districts and communities on MRV.		
Private companies and NGOs: Portucel, EtcTerra, XXX		These institutions have good capacities in GIS, socio-economic informat impacts of their activities on community livelihoods, environmental anal among others		

The construction of the national monitoring system on emissions and removals will be led by DNF/MITADER in coordination with the UT-REDD+. This process is being supported by a project to measure forest-cover changes and carbon stocks at the national level, and to establish monitoring capacity. The project has started in 2013 led by the Ministry of Agriculture in cooperation with the Japan International Cooperation Agency (JICA) and will go until 2018, funded by the Government of Japan (U\$ 9.5 million). This project will provide the basis for the MRV structure in the Zambézia Program. The government has also submitted an additional funding proposal to the FCPF requesting funds to complete a national MRV system.

Mozambique has conducted an inventory of greenhouse gases in 2011 using the IPCC Guidelines (2006), which highlighted the lack of basic information on agriculture, forestry and land- use and land-cover change. There is no system of national carbon accounting or measurement of the impact of land-use changes, and there are only two forest inventories (1997 and 2007) and limited capacity to continuously measure the change in forest area.

Therefore, Zambézia Program will play a critical role in the step-wise approach envisioned by the Government of Mozambique to implement REDD+ at national level. In that sense, there is already an ongoing study for measuring carbon stocks and carbon stock changes in the 7 districts that form the program area. This is study has started in March/15 and will be finalized in March/16, coordinated by the NGO EtcTerra and funded by the FCPF Readiness Funds.

9.2 Describe how the proposed ER Program monitoring system is consistent with the (emerging) national REDD+ monitoring system.

Forest cover monitoring within the Zambézia Program will be based on the National MRV Structure, and will use the analysis of satellite imagery at the national level combined with verification by the provincial offices and local stakeholders. These data originating from the ERP will be used and incorporated to feed and improve the National Forest Resource Information Platform as well as the National REDD+ Registry.

9.3 Describe how the proposed ER Program monitoring system is consistent with UNFCCC guidance available to date and with the emerging Methodological Framework of the FCPF Carbon Fund.

The Zambézia Program monitoring system will be designed to serve as reference to monitoring and managing forest resources in Mozambique. The monitoring and measurement system will be initially applied at the sub-national level, consistent with Decision 2/CP.13, Decision 1/CP.16, and Decision 11/CP.19, and take into account existing national capacities (Decision 11/CP.19), but will evolve in parallel with the national monitoring system that is being structured with support from JICA.

The program's monitoring system and National Forest Resource Information Platform should apply to Tier 2 methods from the IPCC Approach 3, as recommended in the FCPF Methodological Framework in determining reference levels and subsequent changes in forest cover and emissions. The information produced by the monitoring system will be consistent with national mitigation measures and feed the construction of the national reference levels (Decision 14/CP.19). Emissions-related information based on forest monitoring and measurement will be reported to the National Inventory of Greenhouse Gases, in a format consistent with that registry.

The information produced will be consistent, transparent, accurate, exhaustive, and will reduce uncertainty as much as possible under present technical and technological national capacities. These conditions will be satisfied through the use of standardized and publicly available protocols (eventually evolving into national protocols) and information, the continual improvement of methodologies (based on Tier 2 methods and IPCC Approach 3) and sampling intensity, the application of IPCC guidelines, and the storage of information in data bases or registries (National inventory of Greenhouse Gases, and the National REDD+ Initiatives Registry) that will permit the reconstruction of results.

9.4 Describe any potential role of Indigenous Peoples or local communities in the design or implementation of the proposed ER Program monitoring system.

The Program recognizes the opportunity and advantages of engaging local communities and farmers in monitoring activities, such as on the ground validation of GIS analyses, local monitoring/surveillance of forest fires and illegal logging, and data collection for carbon stocks measurements. However, the engagement of local stakeholders must be defined in a participatory planning process that shall be realized together with local leaders, provincial government and district administrations. It is important to note according to internationally-accepted definitions, Mozambique does not have Indigenous Peoples.

The Zambézia Program will build a monitoring and reporting system for REDD+ co-benefits based on the same rationale as the national process, following 4 steps:

- 1. Design a National Monitoring Plan
- 2. Assess capacities and resources for monitoring, identify requirements, and build capacity
- 3. Select indicators and collect baseline data
- 4. Test monitoring plan for co-benefit indicators in demo sites and revise plan as needed

10. Reversals

10.1 Activities to address risks of reversal of greenhouse gas benefits

Please describe major risks of anthropogenic and non-anthropogenic reversals of greenhouse gas benefits (from e.g., fire, agriculture expansion into forest, changes in commodity prices). Also describe any activities or design features in the proposed ER Program that are incorporated to minimize and/or mitigate the anthropogenic risks or reversals, and how these activities are consistent with the design features of the (emerging) national REDD+ strategy to address risks of reversal.

As the part of the national REDD+ Strategy, the ZILMP will address underlying drivers of deforestation with an innovative multi-institutional and multi-stakeholder approach integrating efforts at national, provincial and district governments. This will be instrumental to support a transition to improved land governance, forest conservation and low emissions development.

The major risk of reversal in the program area is the occurrence of uncontrolled forest fires, as it may happen as a result of common practices related to land clearing and charcoal production. The program will mitigate this risk by creating a specific program for fire management and control to be implemented by MITADER and provincial/district authorities.

The main focus of the project is promoting sustainable livelihoods to reduce pressure over the forests, and thus may work as an ally to intensify production with conservation commitments. There is a very small influence from international commodity prices in the land use dynamics and potential reversals, as the main economic activity is subsistence agriculture. There is a potential risk that some farmers may expand their crops after being successful with the new models of conservation agriculture and sustainable cash crops promoted by the program. To avoid and monitor this risk, the program will register all farms included in the program and monitor if the intensified crops are profitable enough to sustain their social needs.

The program also views the implementation of other important community initiatives, such as Mozbio, as a key leverage and strategy to reduce the risk of reversals. MozBio has a strong community development component, which interlinks biodiversity conservation to sustainable forest management and will offer Community Driven Development-like matching grants to initiatives for conservation agriculture and sustainable forestry to communities within and around Gilé National Reserve. This process is driven by community participation in which local communities are actively involved in the identification, design and implementations of projects.

Another significant component of Mozbio involves awareness programs and capacity building aimed at strengthening the capacity of communities, local governments and other partners in the sustainable management of natural resources, including training on the importance of biodiversity/conservation; general topics of biodiversity management and conservation areas, governance, accountability, partnerships and training on project management. These capacity building activities will provide incentives to communities to preserve forests beyond the project timeframe.

11. Displacements

11.1 Description of the potential risks of both domestic and international displacement of emissions (leakage)Please describe the potential risks of both domestic and international displacement of emissions from the proposed ER Program activities. Then also describe how the proposed ER Program activities will minimize the risk of domestic displacement and international displacement (if applicable), via the design of the proposed ER Program and the ER Program activities and the selection of locations. For sub-national programs, pay special attention to identifying domestic risks of displacement of emissions, the proposed ER Program activities to mitigate these risks, which otherwise would contribute to fewer net emission reductions generated by the proposed ER Program, and how these activities are consistent with the design features of the (emerging) national REDD+ strategy to address risks of displacement.

The program does not expect to cause any kind of displacement. The program interventions are directly focused to address the main causes of deforestation and degradation in the program area, through the promotion of alternative energy supply, social improvement and sustainable livelihoods. Migrants drive very little deforestation and nonetheless are excluded from the emissions reduction targets (30-40%) for the first 10 years of the project. In any case, deforestation and displacements will be monitored annually across the program region and its surroundings. If displacements are identified and attributed to the program, they can be compensated by reductions in the payments for ERs generated by the program.

12. Expected emission reductions

12.1 Expected Emission Reductions (ERs)

Please provide an estimate of the expected impact of the proposed ER Program on the REL/FRL (as percentage of emissions to be reduced). Based on this percentage, also estimate the volume of ERs, as expressed in tons of CO_2e , that would be generated by the ER Program:

- a) up to December 31, 2020 (currently the end date of the FCPF)
- b) for a period of 10 years; and
- c) the lifetime of the proposed ER Program, if it is proposed to continue longer than 10 years.

The emission reductions (ERs) expected by ZILMP are calculated based in two different periods/targets for deforestation reduction. The ER targets apply equally in all districts included in the program area. The first period runs from years 1-5 (2016-2020) and has a target of reducing deforestation by 30% in 2020. This target is less ambitious and takes into consideration the challenges to set up the program, generate capacity and getting fully operational for the next periods. From 2021 to 2025 we expect to improve the program operational structure and shift gears towards a more ambitious reduction target of 40% in relation to the FREL.

Figure 9: Expected Emission Reductions for the Zambézia Program between the first ten years of the ER Program (2016 to 2025).

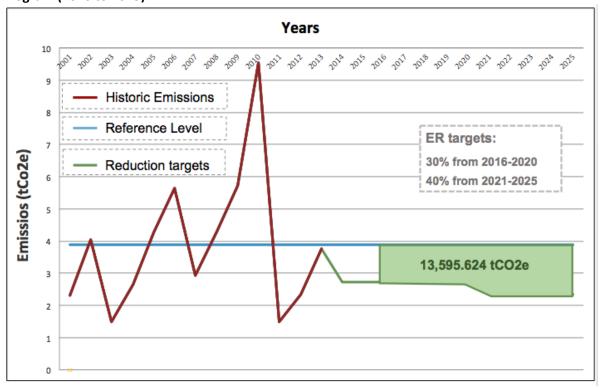


Table 11: Expected Emissions Reductions for the Zambézia Program for 2020, 2025 and 2035.

Program Area	FREL (tCo2/year)	Annual ER target for 2016-2020: <u>30%:</u> (tCo2/year)	Annual ER target 2021- 2035: <u>40%:</u> (tCo2/year)	ERs first 5 years: 2016-2020 (tCo2)	ERs first 10 years: 2016-2025 (tCo2)	ERs first 20 years 2016- 2035 (tCo2)
Alto Molócue	846.541	253.962	338.617	1.269.812,19	2.962.895	6.349.060,97
Gilé	846.996	254.099	338.798	1.270.493,61	2.964.485	6.352.468,03
Ilé	411.346	123.404	164.538	617.019,02	1.439.711	3.085.095,09
Maganja da						
Costa	215.781	64.734	86.312	323.670,94	755.232	1.618.354,69
Pebane	346.612	103.984	138.645	519.917,74	1.213.141	2.599.588,69
Mocubela	280.061	84.018	112.024	420.090,81	980.212	2.100.454,03
Mulevala	936.942	281.083	374.777	1.405.413,28	3.279.298	7.027.066,41
Total	3.884.278	1.165.284	1.553.711	5.826.418	13.594.974	29.132.088

12.2 Volume proposed for the FCPF Carbon Fund

Please explain the portion of the expected ERs that would be offered to the Carbon Fund, and if other carbon finance providers or buyers have been identified to date, the portions of the expected ERs that would be offered to them.

The Government of Mozambique offers to FCPF 80% of the emission reductions that should be generated between 2017 and 2024, which equals to 8,700,784 tCO₂.

13. Preliminary assessment of the proposed ER Program in the context of the national Strategic Environmental and Social Assessment (SESA) and the Environmental and Social Management Framework (ESMF)⁸

13.1 Progress on SESA/ESMF

Please describe the country's progress in the implementation of SESA and the development of the ESMF, and their contribution or relationship to the proposed ER Program.

The SESA process currently underway at the national level serves as the strategic safeguards umbrella to ensure that environmental and social considerations are integrated in the formulation of the REDD+ Strategy and in all other REDD+ related programs, including the ZILMP. This process is recognized by the Government of Mozambique as critical for ensuring the enhancement of biodiversity conservation and the protection of the local communities from the potential impacts of REDD+ on their way of life and well-being.

The SESA is being prepared within a participatory and consultative approach by a consultancy firm through a process that includes extensive consultations and interviews across stakeholder groups, from the community to the national level. The study is financed by the current FCPF Readiness Grant, and is supervised and validated by MITADER and the National Steering Committee (CTR).

The SESA will evaluate the series of indicative strategic options to be adopted in the REDD+ Strategy, providing an analysis of the potential risks and associated mitigation measures in order to guide the eventual selection of Options for the Strategy. As these Options cover the proposed activities for the ER Program, the SESA will also inform the implementation of the ZILMP, and formulate alternatives and design mitigation mechanisms to minimize the potential impacts of the Program. Thus far, the SESA consultant firm team has already completed a series of consultations, including with communities in the ZILMP area and with stakeholders at the provincial level in Quelimane. The SESA is to be completed in October 2015.

The Environmental and Social Management Framework (ESMF) is also under preparation, and will be fully developed after the REDD+ Strategy Options have been refined based on SESA guidance. The ESMF will set out the structures and procedures for undertaking environmental and social due diligence and for the management of future projects, policies and activities through which the refined REDD+ strategy is implemented. The timeline for the ESMF is the first quarter of 2016.

13.2 Incorporation of SESA outputs and/or outcomes into the proposed ER Program

Based on the progress outlined in 7.1, please describe how the proposed ER Program is expected to make use of the outputs and/or outcomes of the SESA process. Provide an analysis of the ways in which activities planned under the proposed ER Program will rely on the measures and procedures included or to be included in the ESMF. Are there likely to be any gaps or issues regarding the compliance of the proposed ER Program activities with applicable safeguard standards, including the UNFCCC safeguards?

The SESA results will support the identification and prioritization of key environmental and social risks in the ER Program, and suggest mitigation measures to address those risks. The ER Program will respect the

⁸ The SESA is the assessment process to be used in FCPF REDD+ countries during R-PP implementation and REDD+ readiness preparation. The ESMF is an output of SESA that provides a framework to examine the issues and impacts associated with projects, activities, and/or policies/regulations that may occur in the future in connection with the implementation of the national REDD+ strategy but that are not known at the present time.

principles of the SESA process and consider seriously the outcomes of the SESA. For instance, in the event that there is resistance to certain activities that emerges through the consultation process, or mitigation measures are not viable, the ER Program will reconsider activities initially proposed in the ER PIN, and these activities will be redesigned during the ER PD development.

One instance where the ER Program could rely on the SESA is in the assessment of conservation agriculture activities. For example, the lack of inclusion of women in conservation agriculture could be an unintended outcome that the SESA would identify. It would thereafter propose a way for the mainstreaming of gender considerations in the REDD+ Strategy. As a broader national framework, the ESMF could propose a *mechanism* for monitoring similar social outcomes from the implementation of programs, and the *reporting procedures* necessary for monitoring them. The framework that results from the ESMF will also allow the ERPD to outline procedures to be followed for managing potential environmental and social impacts of specific policies, actions and projects during the implementation of the ZILMP. There are no issues envisaged that will affect the compliance of the current proposed ER Program with applicable safeguards, including those under the World Bank and UNFCCC.

13.3 Feedback and grievance redress mechanisms

Please describe the mechanism(s) that are or will be put in place to resolve any disputes regarding the proposed ER Program.

Another critical safeguards instrument being developed by the GoM is the Resettlement Policy Framework (RPF), under the World Bank's OP 4.12 on Involuntary Resettlement. Through the SESA, issues related to land acquisition or involuntary resettlement that might emerge will be identified and a RPF will be prepared. The RPF will set out the policies, principles, institutional arrangements, schedules and indicative budgets that will take care of anticipated social negative impacts such as resettlements. The arrangements set out in the Framework will ensure that there is a systematic process (as against an ad hoc one) that assures participation of affected persons, involvement of relevant institutions and stakeholders and adherence to both World Bank and Mozambique procedures and requirements.

The RPF will also propose the design of a Grievance Redress Mechanism (GRM), which will describe options available to stakeholders for grievance redress, the identification of eligibility and valuing of compensation, and any other complaints they may have on issues related to affected properties or livelihoods, including land and income generation activities within the ZILMP. In addition, the redress mechanism shall indicate alternatives in the event that the proposed mechanism does not respond to all grievances and complaints. The GRM will build on existing institutional arrangements, such as the Natural Resources Management Committees and the Zambézia Provincial Forum for REDD+ that was established specifically for the ZILMP. The RPF and design of the GRM are expected to be completed by the first quarter of 2016.

14. Land and resource tenure

14.1 Rights to territories and land, and mitigation benefits

Please describe the land use and land tenure context of the proposed ER Program, and if and how rights to territories and land and mitigation benefits from REDD+ are reflected in traditional practices and codified in legal and/or regulatory frameworks.

Mozambique has one of the most progressive and appropriate political-legal contexts for the promotion of sustainable development (Nhantumbo and Salomão, 2010). The focus on the protection of rural communities' rights to access and use land and other natural resources in Mozambique has become an international benchmark (Cotula 2011). The ZILMP seeks to balance social, environmental and economic issues, paying special attention to rural communities in the program area.

The Land Law of 1997 is the main source of regulatory procedures for land management in the country. By law, the land is state property and cannot be sold or alienated. The main element is the Land Use Right Certificate (DUAT). DUATs can be acquired through inheritance and by peaceful occupation of individuals and rural communities for at least 10 years according to traditional norms and customs. The DUAT can also be acquired through request to the Public Administration.

The absence of title does not affect traditional rights to settle and establish farms by individuals and local communities, which is not subject to time limits. The Land Law of 1997 has been considered exemplary because of the innovative way it deals with customary law and the balance it seeks to establish between community rights and investor rights (Hanlon 2002, World Bank 2010, German et al. 2011). Although land irregularities and conflicts may happen, this is not a major issue in the ZILMP.

Currently, the most important issue for the discussion on REDD+ in Mozambique is the need to harmonize the legal right to use and benefit from the land (DUAT) and the legal right to use and benefit from the forests, which could be abbreviated as DUAF. The DUAT does not confer to national holders and rural communities the right of access to forest resources except for subsistence purposes. The exploration of forest resources for economic purposes by communities, even within common areas, requires state authorization. The state also unilaterally decides on private-sector applications for forest concessions in community areas.

The program will dedicate special attention to land planning, zoning and registration, as it is a crucial step towards improving territorial governance and implementing a landscape approach to reducing deforestation and promoting sustainable development.

15. Benefit Sharing

15.1 Description of envisioned benefit-sharing arrangement for the proposed ER Program.

Please describe the benefit-sharing arrangements that are envisioned to be used for this proposed ER Program.

Mozambique already has experience with benefit-sharing mechanisms. The most important process related to REDD+ and benefit sharing is the (already active) destination of 20% of the revenue derived from the management of forest and fauna resources to local communities (at a lower level than the district). This was legislated in 2002 through the Regulation of Forests and Wildlife with the first payments made in 2005 – after the approval of the ministerial decree that regulates this availability mechanism. Despite the practical difficulties implementing the decree that regulates this process, it represents the most open experience of benefit sharing through the use of forest resources.

The ZILMP also plans to establish and an additional and innovative benefit sharing arrangement to decentralize environmental management within the national and provincial governments, districts administration and local stakeholders and communities. This proposal aims to actively engage this administrations as protagonists in the main activities planned to be implemented by the program. The GoM seeks to keep operational and coordination costs very low and is committed to disburse at least 70% of the revenues generated by the ER's at local level, to generate benefits on the ground to the provincial, districts and local communities.

The major component of the program is focused in sustainable production, improving livelihoods and income generation, and equals for approximately US\$ 9,6 million or the equivalent of 53% of the ZILMP budget generated by ERs over the first 4 years of the program. The budget allocation for the next periods of the program will be decided on a participatory manner engaging all relevant stakeholders and beneficiaries. A distribution of the programs activities/costs (as detailed per Annex 1) is presented in Figure 8.

15.2 Link between the envisioned benefit-sharing arrangement and the activities in the proposed ER Program. Please explain how these benefit-sharing arrangements would support the activities identified in section 5.3 to address the drivers of deforestation and forest degradation. Identify, if possible at this stage, potential issues or constraints that may emerge in development of the ER Program that could need additional progress in order to effectively implement the benefit-sharing mechanisms.

The proposed benefit-sharing arrangement is envisioned to stimulate the commitment and active engagement of the provincial and district administrations in the project implementation, as well as the rural communities and local authorities within the ZILMP. As mentioned before, the program rationale will be to dedicate the great majority of the funds to local levels institutions and communities. As examples, the program will prioritize to contract local service providers for the technical assistance to the conservation agriculture program; for the sustainable forest management program and concessions, the program will strengthen local companies and entrepreneurs instead of incentivizing concessionaries from other regions, etc.

After the first 4-5 years of program implementation, we envision an "incentive mechanism" where deforestation and other key performance indicators would be evaluated and monitored in each district, and allocation of benefits/funds would be proportionally weighted to favor more the ones with better results. In that sense, each district will have to elaborate an "annual work-plan" based on its specific priorities and needs, following the ZILMP master work-plan and activities, in articulation with provincial and national government.

15.3 Progress on benefit-sharing arrangements

Describe the progress made thus far in the discussion and preparation of the benefit-sharing arrangements, and who has been participating in this process.

The proposed arrangement for benefit sharing is led by UT-REDD+, and is being continuously discussed with Zambézia provincial government and district authorities for the construction of the ZILMP investments plan. During the ER-PD stage, we envision broader consultation through the Zambézia Provincial Forum for REDD+.

16. Non Carbon Benefits

16.1 Expected social and environmental benefits

Please describe the environmental and social benefits, other than emission reductions, that the proposed ER Program is planning to achieve; and any other ways in which the ER Program would contribute to broader sustainable development.

The implementation of the proposed ER Program will generate important social, environmental and economic benefits in the province of Zambézia. The main challenge of this program, as any other project

dealing with rural poor populations, is to combine interventions that reduce deforestation and promote forest conservation at the same time that alleviate poverty. As the poorest province of Mozambique, the long-term success of the proposed program is in fact related to its ability to catalyze poverty reduction, employment creation and community participation in forest management and biodiversity conservation.

All of the activities under the proposed ER Program will therefore be aligned with MITADER's overall mission to promote rural development. An integrated landscape approach in this area could yield many benefits and address the area's intertwined issues of deforestation, environmental degradation and rural poverty. Through the ER program Mozambique seeks to achieve the six overarching co- benefits as described in brief below.

- 1. Social, economic and health benefits that will improve livelihoods of rural communities: One of the main objectives of the proposed program is to substantially improve farmers and communities' livelihoods. The integrated landscape approach will help promote a range of intertwined income-generating activities for the local population, such as climate smart agriculture, sustainable charcoal production, non-timber forest products management among others. Helping to integrate smallholder farmers into supply chains for local, regional and global markets will also improve their livelihoods significantly (through employment) and reduce their reliance on slash and burn agriculture, which causes deforestation and GHG emissions. By integrating them and helping to certify their crops through fair trade schemes, farmers will also be able to sell the products for a premium price and thus get extra income. Another key aspect will be securing alternative and sustainable energy sourcing with energy plantations and efficient cook-stoves. Within the area around 80% of the population depend on biomass from fuel-wood, charcoal, and waste from agriculture as their primary source of energy. As charcoal production is an important economic activity as well as a driver of significant forest degradation, the program will, where applicable, support the introduction of technology that improves the charcoal-making practice, such as more efficient biomass-making kilns as well as dissemination of knowledge on improved forest management through more selective cutting of wood and techniques for improved tree regeneration. This could have transformational social and health benefits as using charcoal and fuel wood for cooking also implies a high incidence of acute respiratory infections due to household air pollution.
- 2. Maintenance of high-value biodiversity: The Zambézia Province is home to one of the most well preserved tracts of Miombo forests in the country, in the Gilé National Reserve, and to one of Africa's largest marine conservation areas Archipelago of Primeiras e Segundas Islands, with significant mangrove coverage. Through improved and efficient management of forests, that reduce deforestation and degradation, the program will help to conserve and maintain the local environment and associated ecosystems that are found within and around the reserve. Sustainable management of the ecosystems will also make them less vulnerable to adverse impacts of human pressures and climate change. In the long-run, the preserved biodiversity can also help spur tourism and thus the park incomes to the Gile National Reserve, contributing to improved financial management of the Reserve.
- 3. Improve climate resilience: Mozambique is extremely vulnerable to climate variability and change. Zambézia is a heavily affected province, facing unpredictable climatic conditions (including intense droughts, unpredictable rains, floods and uncontrolled fires). As many of the communities depend on the productivity of their crops for their livelihoods and survival, conservation agricultural techniques can generate substantial change in increasing the ability of smallholder farmers to adapt to climate change including reducing vulnerability to drought, enriching the local natural resource base on which farm productivity depends on as well as increase water-use efficiency. By promoting the formation of cooperatives or other types of agricultural associations, farmers will be able to learn together which will mean that they not only

save time and labor effort, but also help ensure that they combine sales and thus obtain a better price. With predictions of worsened climate change in the future, these initiatives will be fundamental to ensuring decreasing vulnerability to climate change and an improved food security.

- 4. Rehabilitation of degraded lands through reforestation: Land degradation is becoming an increasingly severe problem in Zambézia, threatening wildlife habitats, grazing lands and community livelihoods. The project expects to establish 50,000 hectares of forest plantations and agroforestry systems (including out-grower schemes) that will contribute to addressing this issue. Besides providing additional benefits to water balance and biodiversity in the area, these initiatives can help boost the nature-based tourism in the area as well as other income generating activities such as improved bee-keeping and harvesting of crops. It can also help combat resource-based conflicts to a certain degree.
- 5. Improved forest governance and multi-stakeholder engagement at the local level: The proposed ER program will promote a transparent and participatory decision making process that aims to increase local communities' rights to land and forest resources, promote land use planning and implement benefit sharing mechanisms. The proposed investments will not only improve community-based forest management, by promoting community organization and capacity building, it will also help ensure the participation of various entities in the area, ranging from community organizations, civil society, the private sector and provincial and district governments.

16.2 Diversity and learning value

Please describe the innovative features of the proposed ER Program and what learning value the proposed ER Program would bring to the FCPF Carbon Fund.

Within Mozambique and across the FCPF Portfolio:

- Includes key cross-sectoral interventions to be scaled at national level;
- Engages with landscape stakeholders far beyond the forestry sector: agriculture, hunting, energy, tourism;
- Hosts some of the largest and most well preserved tracts of miombo forests in the coastal forests of East Africa (identified as conservation priorities).
- It is home to *Gilé National Reserve (GNR)*, a unique protected area that offers an exceptional biodiversity and hosts various critically endangered species.
- ER Program includes the *Primeiras and Segundas Marine Reserve*, the largest marine reserve in Africa with extensive mangroves.
- High level engagement and of private sector in key sustainable value chains and emphasis on deforestation-free agricultural commodity (cashew nuts, sesame, pulp and paper, reforestation, etc.)
- High synergy with several projects and programs being implemented by the World Bank in Mozambique (FIP, MozBio, Landscape Project, etc.)

17. Progress on registries

17.1 National registry

Please include a short description of the relationship of the proposed ER Program to national REDD+ activity management arrangements, and if the proposed ER Program will be part of any system to track REDD+ or other emissions reduction activities (e.g., a REDD+ registry).

The GoM has not yet develop significant work in designing and implementation of a national registry. This is part of the activities that will be planned in the National REDD+ Strategy. JICA and MITADER are developing a Forest Resource Information Platform (FRIP) with the objectives of i) establishing a preparatory system for REDD+ and ii) promoting sustainable forest management on the overall goal of the Project. The FRIP is being design to host the information of the National Forest Monitoring System (NFMS), among others. The Forest Resource Information Platform is still under development and, in line with the Decree 70/13, the FRIP will be presented and discussed at the CTR before submission for approval by the government.

18. List of acronyms used in the ER-PIN

Please include an explanation of any institutional or other acronyms used. Add rows as necessary.

Acronym	Meaning
ADRA	Agência Adventista de Desenvolvimento e Recursos Assistenciais
ANAC	National Administration of Conservation Areas
СТА	Confederação das Associações Econômicas de Moçambique
CTR	National Technical Committee for REDD+
ERPA	Emissions Reductions Purchase Agreement
FAO	Food and Agriculture Organization of the United Nations
FCPF	Forest Carbon Partnership Facility
GNR	Gilé National Reserve
IGF	International Foundation for Wildlife Management
IIED	International Institute for Environment and Development
ITC	Iniciativa para Terras Comunitárias
MASA	Ministry of Agriculture and Food Security (MASA)
MITADER	Ministry of Land, Environment and Rural Development
ORAM	Associação Rural de Ajuda Mutua
PA	Protected Area
PRODEZA	Projeto de Apoio ao Desenvolvimento Rural na Provincia da Zambézia
RADEZA	Rede de Organizações para Ambiente e Desenvolvimento Comunitário Sustentável da Zambézia
UT-REDD+	Technical Unit for REDD+
WB	World Bank
ZILMP	Zambezia Integrated Landscapes Management Program
FPIC	Free, Prior and Informed Consent
MEF	Ministry of Finance
MoU	Memorandum of Understanding
JOFCA	Japan Overseas Forestry Consultants Association
NFMS	National Forest Monitoring System
JICA	Japan International Cooperation Agency
FRIP	Forest Resource Information Platform
PIN	Project Idea Note
ER-PIN	Emission Reductions Program Idea Note
REDD+	Reducing Emissions from Deforestation and Forest Degradation
UN	United Nations
GoM	Government of Mozambique
NRS	National REDD+ Strategy
REL	Reference Emissions Level
FREL	Forest Reference Emissions Level
FUNAB	
INE	National Environmental Fund (Mozambique) National Statistics Institute
ESMF	Environmental and Social Management Framework

Annex I: Financing/investment plan summary tables (Table 1: Development, Coordination and Monitoring)

A. D	evelopment, Coordination and Monitoring	2015/ 2016	2017	2018	2019	2020	TOTAL	Funds	Available	Gap - costs to be covered with
							(US\$)	(U\$)	Source	ERs revenues (US\$)
1.	Coordination of national REDD+ processes	4,271,000	1,050,000	1,050,000	750,000	700,000	7,821,000	7,400,000		- 421,000
1.1	Elaboration and consultation of National REDD+ Strategy	150,000	-	-	-	-	150,000	150,000	FCPF	-
1.2	Strategic Env.and Social Assessment (SESA) and Safeguards	421,000	-	-	-	-	421,000	421,000	FCPF	-
1.3	Design and implementation of the national MRV system	1,500,000	500,000	500,000	200,000	200,000	2,900,000	2,500,000	AF	- 400,000
1.3	Increase transparency in forest sector (online platform)	100,000	100,000	100,000	100,000	50,000	450,000			
1.4	Capacity building, consultations and communications	550,000	50,000	50,000	50,000	50,000	750,000	550,000	FCPF	200,000
1.5	Strategic studies on institutional & legal frameworks, agents and drivers of deforestation, others	450,000	-	-	-	-	450,000	450,000	FCPF	-
1.6	UT-REDD+ operational staff	500,000	250,000	250,000	250,000	250,000	1,500,000	1,000,000	FCPF + AF	500,000
1.7	UT-REDD+ operational and administrative costs	600,000	150,000	150,000	150,000	150,000	1,200,000	600,000	FCPF	- 600,000
2.	Design and coordination of the ER Program	215,000	25,000	25,000	25,000	25,000	315,000			- 315,000
2.1	Strategic studies for the program preparation (agents and drivers of deforestation, institutional and legal frameworks, FRELs, carbon/biomass inventories etc.)	150,000	_	_	_	_	150,000	150,000	FCPF	_
2.2	Elaboration and approval of Early Idea, ER-PIN and ER-PD	30,000	ı	-	-	-	30,000	30,000	Carbon Fund	-
2.3	Creation, maintenance of Provincial REDD+ Forum	35,000	25,000	25,000	25,000	25,000	135,000	85,000	FCPF + AF	- 50,000
3.	Operational Staff	300,000	300,000	300,000	300,000	300,000	1,500,000	140,000		- 1,360,000
3.1	Local Coordinator	60,000	60,000	60,000	60,000	60,000	300,000	90,000	FCPF + AF	- 210,000
3.2	Administrative officer and assistant	48,000	48,000	48,000	48,000	48,000	240,000			- 240,000
3.3	MRV/M&E provincial coordinator	42,000	42,000	42,000	42,000	42,000	210,000	50,000	AF	- 160,000
3.4	Field officers/teams	150,000	150,000	150,000	150,000	150,000	750,000			- 750,000
4.	Infrastructure and Equipment	850,000	-	-	150,000	350,000	1,350,000	98,000		- 1,252,000
4.1	Operational REDD+ Office in Quelimane	350,000	-	-	-	-	350,000	-		- 350,000
4.2	Vehicles (5 pickup trucks)	350,000	-	-	-	350,000	700,000	60,000	FCPF	- 640,000

4.3	Computers and equipment (software, GPS, cameras)	150,000	-	<u> </u>	150,000	_ '	300,000	38,000	FCPF + AF	- 262,000
5.	Maintenance Costs	78,000	113,000	113,000	113,000	113,000	530,000	152,000		- 378,000
5.1	Office maintenance	24,000	24,000	24,000	24,000	24,000	120,000	20,000	AF	- 100,000
5.2	Vehicles maintenance	 <u> </u>	35,000	35,000	35,000	35,000	140,000	60,000	AF	- 80,000
5.3	Travels and logistics	30,000	30,000	30,000	30,000	30,000	150,000	40,000	AF	- 110,000
5.4	Fuel and lubricants	24,000	24,000	24,000	24,000	24,000	120,000	32,000	AF	- 88,000
	A. TOTAL (US\$)	5,714,000	1,488,000	1,488,000	1,338,000	1,488,000	10,166,000	7,790,000		- 2,474,000

Annex I: Financing/investment plan summary tables (Table 2: Land Planning, Law Enforcement and Governance)

		2015/ 2016					TOTAL	Funds A	Available	Gap - costs to be covered
B. L	B. Land Planning, Law Enforcement and Governance		2017	2018	2019	2020	(US\$)	(U\$ Million)	Source	with ERs revenues (US\$)
1.	District land development plans	475,000	210,000	210,000	210,000	210,000	1,315,000	-		- 1,315,000
1.1	Development of the guide on "green development plans"	20,000	-	-	-	-	20,000	-		20,000
1.2	Workshops and consultations (7 districts)	140,000	-	-	-	-	140,000	-		- 140,000
1.3	Elaboration of the District Plans (7 districts)	105,000	-	-	-	-	105,000	-		- 105,000
1.4	Support to districts plans implementation (U\$ 30.000 per district)	210,000	210,000	210,000	210,000	210,000	1,050,000	-		- 1,050,000
		-	-	-	-		-	-		-
2.	Land and farmers registration program	300,000	1,985,000	1,985,000	1,985,000	60,000	6,315,000	-		- 6,315,000
2.1	Field registration of community areas and farms 105.00 farms in total	-	1,925,000	1,925,000	1,925,000	-	5,775,000	-		- 5,775,000
2.2	Development and maintenance of a land database/registry	300,000	60,000	60,000	60,000	60,000	540,000	-		- 540,000
		_	_	_	-	-	-	-		-
3.	Management of the Gilé National Reserve	640,000	800,000	305,000	305,000	105,001	2,155,001	760,000		- 1,395,001
3.1	Maintenance of reserve infrastructure	20,000	20,000	20,000	20,000	20,000	100,000	40,000	MozBio	- 60,000
3.2	Vehicles and equipment	150,000	310,000	15,000	15,000	15,001	505,001	480,000	MozBio	- 25,001
3.3	Operations cost and maintenance	50,000	50,000	50,000	50,000	50,000	250,000	160,000	MozBio	90,000

3.4	Strengthening of reserve community staff	20,000	20,000	20,000	20,000	20,000	100,000	80,000	MozBio	20,000
3.5	Implement private and community game hunting area	400,000	400,000	200,000	200,000	-	1,200,000	-		- 1,200,000
		-	·	i	-		-	-		-
4.	Law enforcement, monitoring & control of illegal activities	150,000	150,000	150,000	150,000	- 150,000	450,000	-		-
4.1	Enforcement of SPFF structure (vehicles, management, etc)	150,000	150,000	150,000	150,000	- 150,000	450,000			
							-			-
	B. TOTAL (US\$)	1,565,000	3,145,000	2,650,000	2,650,000	225,001	10,235,001	760,000		- 9,025,001

Annex I: Financing/investment plan summary tables (Table 3: Sustainable Production, livelihoods and income generation)

C. S	ustainable production, livelyhoods and income	2015/ 2016	2047	2010	2242	2222	TOTAL	Funds	Available	Gap - costs to be covered with ERs revenues	
gene	generation		2017	2018	2019	2020	(US\$)	(U\$ Million)	Source	ERs revenues (US\$)	
1.	Conservation agriculture and cash crops	775,000	1,960,000	1,850,000	1,850,000	1,850,000	8,285,000	1,680,000		- 6,605,000	
1.1	Preparation of pilots of agriculture conservation farms in 7 districts	525,000	1,050,000	1,050,000	1,050,000	1,050,000	4,725,000	180,000	AF	- 4,545,000	
1.2	Implementation of sustainable cash crops farms in 7 districts (140/district/year) = 3.820 ha total		490,000	490,000	490,000	490,000	1,960,000	1,500,000	MozBio	- 460,000	
1.3	Exchange with other successful initiatives (south-south to Zambia, Zimbabwe, Brazil, etc.)	250,000	250,000	250,000	250,000	250,000	1,250,000	-		- 1,250,000	
1.4	Market information platform to support fair trade in the communities		170,000	60,000	60,000	60,000	350,000	-		- 350,000	
2.	Structuring of key sustainable supply chains for cash crops (cashew, sesame, mango)	-	2,570,000	70,000	70,000	70,000	2,780,000	-		2,920,000	
2.1	Small fund for sustainable enterprises (ex: cashew industry, cassava processing plant and distribution, etc.)		2,500,000	-	-	1	2,500,000	-	MozBio/WB	- 2,500,000	
2.2	Infrastructure and logistics support to storage and marketing in the farms and communities (ex: sesame, beans) 20 per district	-	70,000	70,000	70,000	70,000	280,000	-		- 280,000	
		-					-	-		-	
3.	Sustainable forest management	330,000	890,000	890,000	430,000	430,000	2,970,000	180,000		4,010,000	
3.1	Strenghtening of 28 Natural Resources Management Committees	-	280,000	280,000	140,000	140,000	840,000	-		- 840,000	

3.3	Structuring of key NTFP projects (honey, mushroom, handcraft, etc.)	-	280,000	280,000	140,000	140,000	840,000	-		- 840,000
3.4	Support to increase development of forest concessions under FSC (Technical Assistance)	330,000	330,000	330,000	150,000	150,000	1,290,000	180,000	AF	
4.	Forest Plantations	•	150,000	150,000	150,000	•	450,000	450,000	1,200,000	2,250,000
4.1	Establish 50,000 hectares of forest plantations (including out-grower schemes)	1	-	ı	-	ı	-	-		-
4.2	Create 15 community forest nurseries	-	150,000	150,000	150,000	-	450,000	450,000		-
							-	-		-
	C. TOTAL (US\$)	1,105,000	5,570,000	2,960,000	2,500,000	2,350,000	14,485,000	2,310,000	1,200,000	2,575,000

Annex I: Financing/investment plan summary tables (Table 4: Community strengthening, social development and energy supply)

D. C	ommunity strengthening, social development and energy	2015/ 2016	2017	2018	2019	2020	TOTAL	Funds	Available	Gap - costs to be covered with ERs revenues
sup	ply	2013/ 2010	2011	2010	2013	2020	(US\$)	(U\$ Million)	Source	ERs revenues (US\$)
1.	Community awareness and capacity building	100,000	400,000	400,000	400,000	55,000	1,355,000	900,000		- 455,000
1.1	Workshops, trainings, meetings	50,000	50,000	50,000	50,000	5,000	205,000	-		205,000
1.2	Preparation of reports, booklets and divulgation materials	50,000	50,000	50,000	50,000	50,000	250,000	-		- 250,000
1.3	Civil society engagement through projects and initiatives funded by FIP DGM	-	300,000	300,000	300,000	-	900,000	900,000	FIP DGM (TBC)	-
2.	Improving access to energy	-	232,500	232,500	232,500	232,500	930,000	58,000		- 872,000
2.1	Distribution of improved cook-stoves poupa-lenha = total 14.000 cook-stoves	-	52,500	52,500	52,500	52,500	210,000	58,000	AF	- 152,000
2.2	Distribution of improved cook-stoves charcoal (Kelimane, Mocuba, Alto Molócue) = 6.000 coo-kstoves	-	45,000	45,000	45,000	45,000	180,000	-		- 180,000
2.3	Implementation of community woodlots (5 per district/year x 7 districts x U\$ 1.000/year	-	35,000	35,000	35,000	35,000	140,000	-		- 140,000
2.4	Projects for Community Charcoal Klins (Maganja, Mocubela, Mulevala, Alto Molocué)	-	100,000	100,000	100,000	100,000	400,000	-		- 400,000
3.	Social improvements and housing		2,187,500	1,500,000	112,000	-	3,799,500	3,799,500		_
3.1	Construction of banks (Gilé, Mocubela, Mulevala, Ile, Pebane)	-	2,187,500	-	-		2,187,500	2,187,500	GoM	-
3.2	Water supply systems (1 district and 28 community level)	-	-	1,500,000	112,000		1,612,000	1,612,000	GoM	-

4.	Research and Development	300,000	300,000	300,000	300,000	300,000	1,500,000	1,500,000	
4.	1 Support to research projects	200,000	200,000	200,000	200,000	200,000	1,000,000	1,000,000	-
4.	Organization and participation in workshops and congresses	100,000	100,000	100,000	100,000	100,000	500,000	500,000	-
	TOTAL (US\$)	400,000	3,120,000	2,432,500	1,044,500	587,500	7,584,500	6,257,500	- 1,327,000



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The Government of Mozambique (GoM) is committed to reduce 40% the deforestation and degradation of the forests in the country by 2030. Additionally, the recently established MITADER consolidates the responsibilities of Land (demarcation, land-use planning, and registry), Environmental (regulations, enforcement and protected areas management) and rural development (poverty reduction in rural areas). This restructuring is a clear indication of the Government's vision and commitment to promote a landscape approach to REDD+. Finally, aiming protecting existing forests from further deforestation and degradation, MITADER, has launched the "Standing Forest Program" (Pacote Floresta em pé). This program is being mainstreamed into various forest related policies, programs and interventions, such as the preparation of the REDD+ Strategy, the Forest Investment Plan, and the forest moratorium".

The government of Mozambique is fully committed to the REDD+ agenda since 2008. In the past two years, Mozambique has taken important steps towards REDD+ Readiness. The UT-REDD+ has been strengthened with full time employees; the national steering committee was created and is well functioning; a national REDD+ strategy is under preparation and will be presented at COP; and two large-scale landscape programs have been identified by the national government.

In this context, Mozambique seeks support from the World Bank and other development partners to become one of the countries of the Forest Carbon Partnership Facility Carbon Fund to pilot a Landscape-Level program. The Zambézia Integrated Landscape Management Program would be developed in a critical landscape in the Zambézia province, which is the 4th most deforested province in the country, accounting for 13% of the total forest cover and 8% of total deforestation. This unique miombo landscape also is home of the Gilé National Reserve and a Marine Reserve with pristine mangrove forests. This program intent to create an innovative governance arrangement connecting the national, provincial

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and district governments, and at the same time working across sectors. We hope this program brings economic rural development for the local population and at the same time generates Emissions Reductions.

Based on the above mentioned we would like to submit the ER-PIN as part of the process of ensuring the availability or resources for our program that is expected to start its implementation from 2016. Is our hope that the result of this process will contribute significantly to poverty reduction and therefore improve the resilience of the landscape in providing goods and services for the wellbeing of our communities.

Quelimane, to September 11s, 2015

The Governor of Province

Abdul Razak Noormamed, MD;DTMH

To: The Facility Management Team Forest Carbon Partnership Facility The World Bank

Washington, DC

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