

# Forest Carbon Partnership Facility (FCPF) Technical Assessment of Advanced Draft MOZAMBIQUE

## I General Approach of the Review

Each TAP member revised the parts of the ER-PD in relation to a series of criteria and indicators that are in accordance with his/her professional experience. One teleconference was held to explain the evaluation procedure and to clarify doubts. The TAP coordinator organized and supplemented where necessary the comments of the TAP members, and did the final editing of the text. All criteria and indicators were systematically discussed with members of Mozambique Host Country REDD+ Team.

TAP members and members of the FMT/BM, did a country visit from 10 to 14, April 2017. During this visit, the TAP members explained in detail why they considered that certain criteria or indicators did not meet the requirements stipulated in the Methodological Framework and how these observations could be incorporated in a revised version of the ER-PD. Mozambique agreed to submit an advanced draft ER-PD. As such, the first report is based on the review of the advanced draft of August 23, 2017 (Advanced Draft) and additional documents provided to the TAP, comments made during teleconferences and emails.

Those criteria or indicators that at this stage do not completely meet the requirements of the Methodological Framework, according to the opinion of the TAP, are qualified as not met, this in accordance with the decisions taken in the TAP orientation Workshop in Bonn (sept 4-5, 2015).

## PART 1 OF TECHNICAL ASSESSMENT: Summary

**Date of Current Assessment:** 21 , August 2017

**Date of Current Assessment:** Advanced Draft of the ER PD, August 23, 2017.

**Name of Assessment team members:**

1. Ludovino Lopes - (Lead Reviewer and Legal Expert): general coordination, text editing,
2. Inthamoussu, Agustin (Carbon Accounting Expert): Carbon accounting (section 3) - Scope and methods (3 to 6), Uncertainties (7 to 9), Reference Level (10 to 13), Reference level, monitoring & reporting on emission reductions (10 to 15), Accounting for Displacement (leakage) (17), Accounting for Reversals Criteria (18 – 21), and Accounting for ERs (22 and 23). Carbon accounting expert also provided supplementary analyses for drivers of deforestation (27.1).
3. Sean Nazerali – Local Expert and Social Safeguards and Non-Carbon Benefits (Section 4, part of section 5 – Sections 15 and 16 )

<p><b>Summary Assessment of the Quality and Completeness of the ER-PD:</b></p> <p>Mozambique has prepared an interesting and exhaustive ERPD document with more than 300 pages that can lead to an important REDD+ program. The Host Country has made a great effort putting together a significant amount of information, both in the ER-PD and in the various annexes provided to the TAP. The quality of the document is very good, especially on the carbon accounting where the level of compliance of the Final ER-PD against the CF methodological framework was evaluated almost with a 100% compliance. On Environmental Safeguards and Non-Carbon Benefits Sections the ER PD brings substantial and extensive information. A detailed description on the Analysis of the Drivers of Deforestation, Assessment of the major barriers to REDD, Land and Resource Tenure are also included. The Sections related to Feedback and Grievance Redress Mechanism (FGRM), Benefit Sharing Arrangements, Title to Emission Reductions, Data Management and Registry Systems provide also detailed and rich information but are still at the date of this TAP Report Assessment missing the existence of some of the critical elements such as the Benefit Sharing Mechanism and some final decisions on the regulatory procedures to Transfer the Title to Emission Reductions, Guidance and Regulatory Procedures on Data Management and the Decision on how will be managed the ERs Transaction Registry System.</p> <p>In total, 51 criteria or indicators are met, 12 are not met, and 15 are not applicable at this stage.</p>	Indicators	1 <sup>st</sup> Assessment	2 <sup>nd</sup> assessment
<p><b>II. Level of Ambition → Criteria 1 – 2, including issues relating to legal aspects</b></p> <p>The ER PD is ambitious and has been designed taking in consideration a jurisdictional scale/approach even it referees only to a portion of Mozambique territory. The area chosen by the Host Country covers 9 districts: Alto Molocue, Gile, Gurue, Ile, Maganja da Costa, Mocuba, Mocubela, Mulevala and Pebane. In this area, deforestation is way above national level, with an annual deforestation rate reaching 0.89% between 2005 and 2013 and 1.07% between 2010 and 2013. According to extraction from national data, between 2005 and 2015 (ER Program reference period), total deforestation in the ER Program accounting area represented 350,610 ha – corresponding to 35,061 ha/yr. The Reference Emission Level for the ER Program area is 10,220,558 tCO<sub>2</sub>e/yr.</p> <p>This area contains a representative sample of stakeholders directly and indirectly connected with deforestation on native forests in the country. As such, the program can be considered as ambitious. In this section, all 3 indicators are met.</p> <p>The ER PD Program describes in a detailed in exhaustive way the Land Tenure implications, the legal nature of the rights connected to the land ownership and Carbon Rights, of the State, of the communities and the private stakeholders. Important to see in this context the most recent 2004 Constitution of the Republic of Mozambique (CRM), stating that ...” land is the property of the State and cannot be bought and sold, mortgaged or otherwise alienated. Also, the same “Magna Carta” of the Country recognizes in its Article 110 the land use and benefit rights mechanism, the (DUAT) to all who want to use land, “taking into account their social or economic purpose”. Important in this context also is Article 111 of the CRM states that already acquired rights must be considered when new rights are being allocated - to investors for example. The existence of those main legal mechanisms: DUATs and the associated and implied DUAFs (Forest Use Rights) assure to the community’s individuals and private investors the rights to explore the natural resources of the land (forest and non-forest products). Besides and previous to those recent legal provisions inserted on the Magna Carta the country as enacted in 1995 a New National Land Policy (NLP) and in 1997 a new Land Law, that gave full recognition to rights acquired through these customary systems. Finally, the country is actively revising is most important regulatory framework on REDD+ (The Decree 70/2013 – That establishes the</p>	<p><b>1.1</b></p> <p><b>1.2</b></p> <p><b>1.3</b></p>	<p><b>YES</b></p> <p><b>YES</b></p> <p><b>YES</b></p>	

<p>procedures for approval of REDD+ projects) to be transformed in a National Jurisdictional REDD+ Regulatory Program Approach that will address the compliance of the ER PD Methodological Framework (especially on the Legal Components of the Benefit Sharing Mechanism, ERs Title Transfer and Double Counting Mechanisms). This revision is expected in accordance to the country statements to be ready in a short period of time (before the final presentation of the ERPD).</p> <p>In conclusion, the Country demonstrated that as a high ambition, not only by describing the existent legal framework, but also on the will to revise/update and implement new legal provisions even if that demands a significant effort to reformulate the existing legislation to address and be in compliance with the ER Program Methodological Framework.</p>			
<p><b>III. Carbon Accounting</b></p> <p><b>III (a) Scope and methods→ Criteria 3 - 6</b></p> <p><b>III (b) Uncertainties→ Criteria 7 - 9</b></p> <p><b>III (c) Reference Level→ Criteria 10 - 13</b></p> <p><b>III (d) Reference Level, Monitoring &amp; Reporting on Emission Reductions→ Criteria 14-16</b></p> <p><b>III (e) Accounting for Displacement (leakage) → Criterion 17</b></p> <p><b>III (f) Accounting for Reversals→ Criteria 18 – 21</b></p> <p><b>III (g) Accounting for ERs → Criteria 22 - 23</b></p> <p>The document presents, in general, a very detailed analysis in this section. The work is commendable and rigorous in all criteria.</p> <p>Mozambique's ER-PD has considered only emissions from deforestation. Other activities are not part of the plan and the TAP understands and agrees with the justifications provided. Aboveground and below ground biomass are considered for the estimation of the Forest Reference Level and MRV. Other carbon pools are being considered for the National Forest Reference Level within the National Forest Inventory and Mozambique has stated there might be included in the actualization of the historical Reference Level if they are significant. However, the Methodological Framework does not consider this possibility; the inclusion of activities and/or pools is not permitted in ER Program in following stages. Activity data is developed at national level and an extraction of results are used for the ER Program area. Emission factors are obtained from dedicated forest inventories (Miombo forest) and literature (Mountain forest). Despite reasonable emission factors values are presented (compared to international papers checked by the TAP) and uncertainty is within normal parameters, they will be different –but comparable- from the emission factors to be obtained during the MRV. The ER Program will use emission factors obtained from the National Forestry Inventory (probably by vegetation type/land use) for the MRV and to actualize the historical reference level.</p> <p>Displacement and reversals in the ER Program are well treated and considered in the document. Great advances have been made since the first version of the document and in the Monitoring Reporting and Verification section.</p> <p>However, TAP encourages responsible teams to conclude with the progress made: complete the Land Use and Land Change analysis for 2016 that will result in lowering the AD uncertainty and to obtain and use the emission factors obtained from the National Forest Inventory. In summary, the proposals for improvement of EFs and AD the TAP should be continued and completed to achieve higher level of precision and accuracy in the estimation of emission reductions.</p> <p>The level of compliance of the Final ER-PD against the CF methodological framework in this section was evaluated with a 100% compliance, apart from the Criterion 23 that corresponding to the existence of</p>	<p><b>3.1</b></p> <p><b>3.2</b></p> <p><b>3.3</b></p> <p><b>4.1</b></p> <p><b>4.2</b></p> <p><b>5.1</b></p> <p><b>6.1</b></p> <p><b>6.2</b></p> <p><b>7.1</b></p> <p><b>7.2</b></p> <p><b>8.1</b></p> <p><b>8.2</b></p> <p><b>9.1</b></p> <p><b>9.2</b></p> <p><b>9.3</b></p> <p><b>10.1</b></p> <p><b>10.2</b></p> <p><b>10.3</b></p> <p><b>11.1</b></p> <p><b>11.2</b></p> <p><b>12.1</b></p> <p><b>13.1</b></p> <p><b>13.2</b></p> <p><b>13.3</b></p> <p><b>13.4</b></p> <p><b>14.1</b></p> <p><b>14.2</b></p> <p><b>14.3</b></p> <p><b>15.1</b></p> <p><b>16.1</b></p> <p><b>17.1</b></p> <p><b>17.2</b></p> <p><b>17.3</b></p> <p><b>17.4</b></p> <p><b>18.1</b></p> <p><b>18.2</b></p>	<p>YES</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>N/A</p> <p>N/A</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>N/A</p> <p>N/A</p> <p>N/A</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>YES</p>	<p></p> <p></p> <p></p> <p></p> <p></p> <p></p> <p></p> <p></p> <p></p> <p></p> <p></p> <p></p> <p></p> <p>*</p> <p>*</p> <p></p> <p></p> <p></p> <p></p> <p></p> <p></p> <p></p> <p>N/A</p> <p>N/A</p> <p>N/A</p> <p>*</p> <p>*</p> <p>*</p> <p></p> <p></p> <p></p> <p></p> <p></p>

the participation of the Participation under other GHG initiatives and Data management and Registry systems to avoid multiple claims to ERs.	19.1	YES	
	20.1	N.A	
	20.2	N.A	
	21.1	YES	
	21.2	N.A	
	22	YES	
	23	NO	
<b>IV. Safeguards</b>  <b>Actions undertaken to meet WB and Cancun Safeguards→ Criteria 24-26</b>  The ER Program address in the detail the Safeguard elements and is in accordance with WB and Cancun Safeguards. The ER Program describes in a detailed way the legal context of the Environmental Safeguards in Section 14.1 and 14.2. The Country shows that is in compliance with the Methodological Framework considering: 1 ) The adherence to and the adoption of a series of international and regional environmental protection and conservation conventions and protocols, which are described in section 4 and Table 26 (Mozambique signed the UNFCCC on 3 November 1992, and ratified the Kyoto Protocol on 18 January 2005, and entered the protocol into force on 18 April 2005. Mozambique is one of the 196 countries that signed and ratified the agreement to reduce greenhouse gas emissions to contain global warming to 2°C, and finally the ER Program attends to Decision 1/CP.16 and its Appendix I as adopted by the UNFCCC; 2) The approval of a significant set of legislation with direct and indirect implications to environmental protection, which were detailed in section 4 and in Table 25 (special reference should be done to the Environmental Impacts Assessment (EIA) Regulation, approved by Decree 54/2015 (that regulates the safeguards procedures); and 3) The creation of specific public institutions or strengthening of existing institutions dedicated to both environmental and social management.4) The approval of the SESA and ESMF in accordance with the Methodological Framework.	24.1	YES	N.A
	24.2	YES	
	25.1	YES	
	25.2	N.A	
	26.1	YES	
	26.2	YES	
	26.3	YES	
<b>V. Sustainable Program Design and Implementation</b>  <b>V. (a) Drivers and Land Resource Tenure Assessment → Criteria 27-28</b>  <b>V. (b) Benefit sharing → Criteria 29 – 33</b>  <b>V. (c) Non-Carbon Benefits → Criteria 34 – 35</b>  The ERPD address the main Drivers and address the strategy to trigger each one in the context of the ER Program area. The ER Program also complement the strategies inserted on the ER Program with other several programs already ongoing within or connected to the Zambezia province area. In this context, the ER Program address also the Land Resource Tenure Assessment and enunciates in a detailed way the challenges on each one of the Land Type Tenure Resources (Public Forest Lands, Community Right Holders, Individual Rights Holders and private investors – trough the legal instruments called under the national legislation DUATs and DUAFs. (DUAFs).  On Benefit Sharing the ER Program proposes a series of options to distribute the benefits among the communities and the different stakeholders using as an initial support the 20% Benefit Sharing Rule Mechanism already in place in the country to distribute revenues from investments made on the lands where communities are situated. The types of benefits are listed also in a detailed and exhaustive way. Nevertheless, the document doesn't have yet a formal and final Benefit Sharing Agreement.	27.1	YES	* * N.A N.A N.A N.A N.A N.A N.A N.A N.A N.A N.A N.A N.A N.A N.A
	27.2	YES	
	28.1	YES	
	28.2	YES	
	28.3	YES	
	29	NO	
	30.1	N.A	
	31.1	N.A	
	32.1	N.A	
	33.1	NO	
	34.1	YES	
	34.2	YES	
	35.1	YES	
	35.2	N.A	

Also the host country needs to formalize and finalize the procedures to accomplish the creation/implementation of Redress Grievance Mechanism. The TAP recommends the finalization of the Benefit Sharing Mechanism and the formalization of the FGRM.			
<b>VI. ER Program Transactions</b> <b>VI (a) ERPA Signing Authority and Transfer of Title To ERs → Criterion 36</b> <b>VI (b) Data Management and ER Transaction Registries → Criteria 37 - 38</b>  <p>The ER Program defines clearly the ER Program Entity that will be authorized to Sign the ERPA and Transfer Title to ERs to the Carbon Fund as the Ministry of Economy and Finance (MEF). The Mozambican Ministry of Economy and Finance is responsible for managing and coordinating national financial planning process. It aims to ensure the integrated and balanced economic and social development of the country, through consolidating an integrated system of planning and implementing a sustainable and decentralized development strategy. According to TAP assessment the Ministry of Economy and Finance has the authority to sign the ER-PA, but there are still some legal and regulatory issue that will not allow the ER Program Entity to transfer directly the Title to the Carbon Fund (especially those related to the community's rights (DUATs and DUAFs) that needs to be addressed on the new legal dispositions (The REDD Decree - actually under development).</p> <p>On Data Management, the ER PD is still missing a significant number of elements in order that the Host Country could achieve the Methodological Framework. The country as already taken the decision to manage by themselves the REDD Program and Projects Data Management System, but doesn't have yet the Guidelines to manage the Data Base. On the ER Transaction Registry the Country is still missing both criteria : The definition if is going to manage by himself the Registry or is going to delegate it to a third party and also the definition of the operational procedures to manage the Registry in accordance to the Methodological Framework.</p>	<b>36.1</b> YES <b>36.2</b> NO <b>36.3</b> NO <b>37.1</b> YES <b>37.2</b> NO <b>37.3</b> NO <b>37.4</b> NO <b>38.1</b> NO <b>38.2</b> NO <b>38.3</b> NO <b>38.4</b> NO	* * *	
<b>SUMMARY SCORE and overall comment:</b>  <p>In total, 51 criteria or indicators are met, 12 are not met, and 15 are not applicable at this stage.</p> <p>The comments on the indicators that are met or not met are outlined in the corresponding sections of the review and the indicators that are not met refer to:</p> <p>Participation under other GHG initiatives - 23</p> <p>Benefit Sharing Mechanism – Criterion 33</p> <p>ERPA Signing Authority and Transfer of Title to ERs - Criterion 36.2 and 36.3</p> <p>Data Management and ER Transaction Registries - Criteria 37.2, 37.3, 37.4 – 38.1, 38.2,38.3 and 38.4</p> <p>All indicators of the sections of ambition and sustainable program design and implementation are met or not applicable at this stage. All Indicators of the carbon accounting are almost 100% met (the country has done a great job on the issues related to carbon accounting);</p> <p>Finally, the ER-PD Program Host Country needs to draft the final: (i) The Benefit Sharing Plan B- SP; (ii) The operational guidelines on the Data Management and ER Registry Transaction; The ER PD Program Host Country needs also to decide if the ER Transaction Registry will be managed by the country or through a third party.</p>			

## PART 2 OF TECHNICAL ASSESSMENT: DETAILED ASSESSMENT

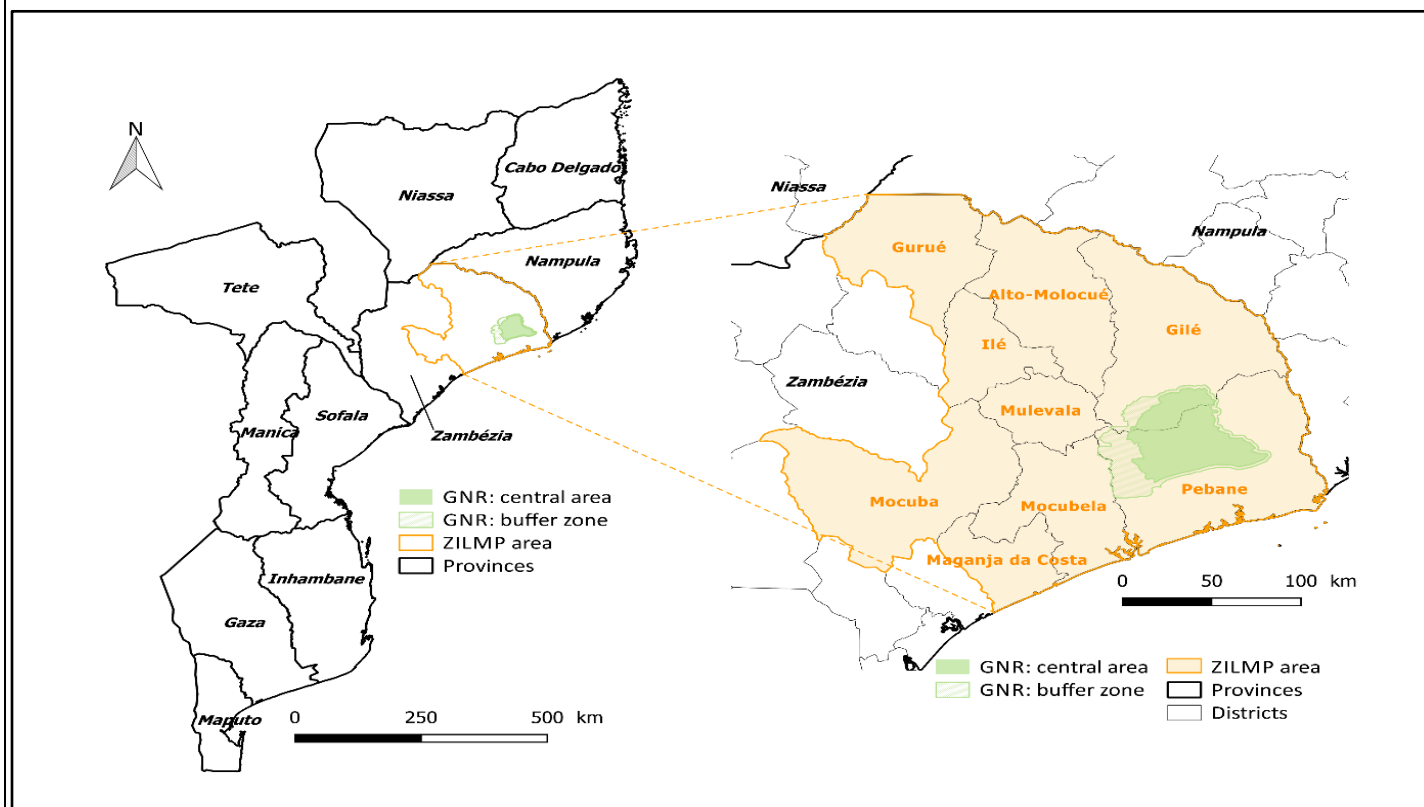
<b>C. 1 The proposed ER Program is ambitious, demonstrating the potential of the full implementation of the variety of interventions of the national REDD+ strategy, and is implemented at a jurisdictional scale or programmatic scale.</b>	
<b>Ind. 1.1</b> The ER Program Measures aim to address a significant portion of forest-related emissions and removals  [Ambition and strategic rationale for the ER Program – 2.2]	<b>YES</b>
The area chosen by the Host Country covers 9 districts: Alto Molocue, Gile, Gurue, Ile, Maganja da Costa, Mocuba, Mocubela, Mulevala and Pebane. In this area, deforestation is way above national level, with an annual deforestation rate reaching 0.89% between 2005 and 2013 and 1.07% between 2010 and 2013. According to extraction from national data, between 2005 and 2015 (ER Program reference period), total deforestation in the ER Program accounting area represented 350,610 ha – corresponding to 35,061 ha/yr. The Reference Emission Level for the ER Program area is 10,220,558 tCO <sub>2</sub> e/yr.	
<b>Ind. 1.2</b> The ER Program is ambitious, uses new or enhanced ER Program Measures to reduce Emissions or enhance removals, is undertaken at a jurisdictional scale and/or takes a programmatic approach (i.e., involves multiple land areas, landowners or managers within one or several jurisdictions), and reflects a variety of interventions from the national REDD+ strategy in a coordinated manner.  [Ambition and strategic rationale for the ER Program – 2.2, 2.3]	<b>YES</b>
Even the ER program is subnational, it has well-defined jurisdictional limits and has been designed taking in consideration a jurisdictional scale/approach and a programmatic approach. The area chosen by the Host Country covers 9 districts: Alto Molocue, Gile, Gurue, Ile, Maganja da Costa, Mocuba, Mocubela, Mulevala and Pebane. In the chosen area, the deforestation is way above national level, with an annual deforestation rate reaching 0.89% between 2005 and 2013 and 1.07% between 2010 and 2013. The ER Program also address the main drivers of deforestation in the country and describes exhaustively the different land tenures risks and the legal land tenure type of right holders (Public Forest Lands, Community Right Holders (with or without formal DUATs), Individual Rights Holders (DUAFs) and private investors (DUATs)).	
<b>C. 2 The Accounting Area matches a government- designated area that is of significant scale</b>	
<b>Ind. 2.1</b> The Accounting Area is of significant scale and aligns with one or more jurisdictions; or a national-government-designated area (e.g., ecoregion) or areas.  [Accounting Area of the ER Program – 3.1]	<b>YES</b>
Yes the ER Program is located in an area of significant scale and within a National government designated area - the Provincial Government of Zambezia). The area covers 9 districts: Gilé, Pebane, Maganja da Costa, Mocubela, Ilé, Mulevala and Alto-Molocué, Mocuba and Gurué with 5.3 million ha, including, in 2014, 2.6 million ha of forest, which represents 48% of the ER Program area.  To a more detailed description and identification see below on table 7 the description of each District and on Figure 2 the geo-location of the Program Area:	

Table 1: Surface of the ZILMP area (Mercier et al, 2016)

District	District Area (ha)	Forest Area 2014 (ha)** (mangroves excluded)	Percentage of forest cover
Alto-Molocué	630,812	227,596	36%
Gilé	896,516	543,366	61%
Ilé	303,411	90,147	30%
Maganja da Costa	267,925	94,134	35%
Mocubela	499,234	319,636	64%
Mulevala	261,685	126,358	48%
Pebane	1,005,479	582,546	58%
Mocuba	873,300*	504,246	58%
Gurué	560,600*	73,144	13%
<b>ZILMP area</b>	<b>5,298,962</b>	<b>2,561,173</b>	<b>48%</b>

Those data are extracted from (Mercier et al., 2016) and from : (i) \* Governo de Moçambique, 2005b; 2005c; (ii) \*\* Etc Terra for the ER-PD

Figure 1: Location of the ER Program Accounting Area, including the GNR



C. 3 The ER Program can choose which sources and sinks associated with any of the REDD+ Activities will be accounted for, measured, and reported, and included in the ER Program Reference Level. At a minimum, ER



<b>Programs must account for emissions from deforestation. Emissions from forest degradation also should be accounted for where such emissions are significant.</b>	
<b>Ind. 3.1</b> The ER Program identifies which anthropogenic sources and sinks associated with any of the REDD+ Activities will be accounted for in the ER Program  [Description of Sources and Sinks selected – 8.1]	<b>YES</b>
<p>The ER Program only considers emissions from deforestation within the ER Program. Other activities included in the FCPF Methodological Framework are not included, according to the following justifications:</p> <ul style="list-style-type: none"> <li>• Forest degradation: the activity is not considered for conservative reasons and is estimated as a not significant source of emissions. Deforestation is caused mainly by forest exploitation, and to a lesser extent charcoal production. The ERPD states that degradation does not have a correlation to anthropogenic activities or to forest edge. Based on estimation of exploited volumes in Zambezia (legal and illegal logging), emissions from degradation represents 37,945 tCO<sub>2</sub>e, this is less than 10% of total forest-related emissions in the Reference Period. Methods and results were evaluated during site visit and TAP experts consider this exclusion reasonable.</li> <li>• Enhancement of carbon stocks: some plantations exits in the ZILMP (Zambezia Integrated Landscape Management Program) are but not all of them respect the UNFCCC safeguards referred to REDD+ program that should not lead to the conversion of natural forest. Moreover, although assisted natural regeneration activities are part of the proposed ER Program interventions, the few areas managed for natural regeneration actually represents a small part of the ER Program area. It is considered and assessed as conservative not to include the activity.</li> <li>• Sustainable management of forest: Although some ER Program activities focus on improved forest management and planning, those would only result in reduction of emissions from degradation, which are not considered in the ER Program. Moreover, it is conservative not to include this activity.</li> <li>• Conservation of carbon stocks: Gile National Reserve (GNR) is within the area of the ZILMP accounting area. There is a REDD+ project developed in its buffer zone. GRN will indirectly benefit from the program funds through its performance in reducing deforestation in this area. According to explained during TAP site visit, the REDD+ Project will be finished once the ZILMP Program enters in action, to avoid double counting. No additional accounting of conservation efforts was therefore included in the ER-Program.</li> </ul>	
<b>Ind. 3.2</b> The ER Program accounts for emissions from deforestation. [Description of Sources and Sinks selected – 8.1]	<b>YES</b>
<p>Mozambique possesses a significant portion of natural forest: 51% of its territory is composed of natural forest (that is 40.6 million hectares). Miombo forest is the most extensive forest type, covering approximately two third of the country. Yet, historical deforestation rate in Mozambique is estimated to reach 0.23% between 2000 and 2012, representing an annual loss of 138,000 ha of forest per year and an amount of emissions close to 12 Mt/CO<sub>2</sub>e per year. Deforestation is especially concentrated in areas of greater population density, especially in the Central and Northern provinces of the country, where the ER Program is located.</p> <p>Concerned about growing deforestation in the Zambézia Province (Central-Northern Mozambique), the Government of Mozambique (GoM) is willing to develop and implement an innovative Emissions Reductions Program (ER Program) in Zambézia province. Designed at jurisdictional scale, as an up-scale of a previous REDD+ pilot project launched in the Gilé National Reserve (GNR) in 2014, the Zambézia Integrated Landscape Management Program (ZILMP) has been proposed for inclusion into the Forest Carbon Partnership Facility - Carbon Fund (FCPF CF).</p> <p>The ER Program will be implemented in 9 districts (Alto Molocue, Gile, Gurue, Ile, Maganja da Costa, Mocuba, Mocubela, Mulevala and Pebane) of Zambézia province, which represent a total area of 5.3 millions ha including, in 2014, with 2.6 million ha of forest (including mangrove) – that is, 49% of the ER Program area. In the ER Program area,</p>	



<p>the GNR represents a significant share of natural forest and regionally and nationally significant concentrations of biodiversity values. Inhabited, it is the largest uninterrupted forest massif of Northern Mozambique.</p> <p>Deforested area within the ER Program totalizes 350,610 ha from 2005 to 2015 with an estimation error of 13.7%. Total emissions from deforestation accounts for 10,220,558 tCO<sub>2</sub> per year.</p> <p>The main drivers of deforestation and forest degradation in the ER Program area are: (i) small-scale agriculture; (ii) forestry (illegal logging and too rapid expansion of areas granted under simple licensing exploitation); (iii) charcoal production.</p>	
<p><b>Ind. 3.3</b> Emissions from forest degradation are accounted for where such emissions are more than 10% of total forest-related emissions in the Accounting Area, during the Reference Period and during the Term of the ER-PA. These emissions are estimated using the best available data (including proxy activities or data).</p> <p>[Description of Sources and Sinks selected – 8.1]</p>	<p><b>YES</b></p>
<p>In the ER Program area, forest degradation is mainly caused by forest exploitation and, to a lesser extent, by charcoal production (which is mainly a by-product of agriculture practices). The ER Program does not include forest degradation in the sources of emissions because it is a conservative option and it is estimated to not be a significant source.</p> <p>Moreover, analysis shows that proximity to anthropic activities or to forest edge does not have a correlation to degraded forests. On this basis, it is not possible to delimitate degraded forest with the indirect approach of the GOFC-GOLD. Secondary data from literature gives an estimation of emissions due to forest exploitation in the accounting area of 37,945 tCO<sub>2</sub>e (Mercier et al., 2016), which corresponds to less than 10% of emissions due to deforestation. The method to estimate those emissions is described in Annex 3 of the ERPD and was corroborated during the TAP site visit.</p> <p>Notwithstanding, forest degradation and enhancement of carbon stocks is being analyzed at national level, for the development of national forest reference level (FRL), but results will be available in 2018. The method planned for the analysis is described in the monitoring section 9 “Approach for measurement, monitoring and reporting”.</p> <p>The ERPD established that if the national analysis proves these activities, sources and sinks are significant; the possibility of their integration will be reassessed during the monitoring periods. The TAP members commends the improvement plan presented in the ERPD, but the Carbon Fund Methodological Framework does not accepts the inclusion of new activities or pools in the actualization of the historical reference level.</p>	
<p><b>C. 4 The ER Program should account for, measure and report, and include in the ER Program Reference Level, significant carbon pools and greenhouse gases, except where their exclusion would underestimate total emission reductions.</b></p>	
<p><b>Ind. 4.1</b> The ER Program accounts for all Carbon Pools and greenhouse gases that are significant within the Accounting Area, both for Reference Level setting and Measurement, Monitoring and reporting (MMR).</p> <p>[Description of Carbon Pools and greenhouse gases selected – 8.2]</p>	<p><b>YES</b></p>
<p>Above ground biomass (AGB) and below ground biomass (BGB) is considered in the RL with activity data from spatially explicit tracking of land use conversion over time (point sampling) and emissions factors from the literature (Mountainous forest) and dedicated biomass inventories (Miombo forest).</p> <p>Dead organic matter (DOM), according to ERPD, is probably not significant as dead wood is collected for firewood or burnt during bush fires of the dry season. Although it is conservative not to account for this pool in the ER Program RL, it is being considered in the National Forest Inventory (currently under development and its results should be available in 2018) and will be estimated during national MRV. Soil organic carbon (SOC) is not included in the RL for conservative reasons. The values for these pools would not be considered in the frame of the ZILMP ER Program.</p> <p>The Program Measurement and MRV system is based on the NFMS (National Forest Monitoring system), which is being developed at national level by the MRV team in the FNDS (Fundo Nacional de Desenvolvimento). For the ER Program,</p>	

the activity data and the emissions factors will be extracted from the results of the NFMS on the same frequency for the sources and sinks and carbon pools considered in the program. The NFMS is composed of the National Forest Inventory and Activity Data monitoring system.

With the results from the NFI, it will be possible to calculate at the beginning of 2018 the carbon content for aboveground (AGB), below-ground biomass (BGB), dead organic matter (litter and dead wood) and soil organic carbon pool (SOC) by vegetation type/ land use, and the corresponding EFs.

As it is stated in the ERPD, if carbon pools that are not included in the present document happen to be significant, they will be integrated in the RL that will be revised for the next MRV phase, once results from the NFI are available. Moreover, national average for the strata of interest in the ER Program area (Miombo, Mopane, Montane and Coastal forests) will be used to update EF of the RL for the next MRV session of the ER program in order to guarantee consistency with national FREL. In 2018, AD and EF of each stratum identified on the LULC map in the ER Program area will be accounted for and updated if the carbon stocks between strata are significantly different. Otherwise, strata will be merged as it has been done in the present document (Semi-deciduous forest for Miombo and Mopane forests for example).

Section 9 of the ERPD “Approach for measurement, monitoring and reporting” describes the procedures to obtain information of dead organic matter and soil organic carbon. Despite explained above, the TAP wants to envisage that the inclusion of new pools will not allowed in the Program. EF and AD obtained with a higher accuracy or in higher level of detail is permitted and encouraged.

CH<sub>4</sub> and N<sub>2</sub>O are not considered. It causes every year greenhouses gas emissions but they correspond to less than 10% of emissions due to deforestation: in average (2001-2016) 3% of total emissions from fires in forests remaining forests and 9.7% of total emissions from all fires of the ZILMP area, including fires in savannah.

<p><b>Ind. 4.2 Carbon Pools and greenhouse gases may be excluded if:</b></p> <ul style="list-style-type: none"> <li>I. Emissions associated with excluded Carbon Pools and greenhouse gases are collectively estimated to amount to less than 10% of total forest-related emissions in the Accounting Area during the Reference Period; or</li> <li>II. The ER Program can demonstrate that excluding such Carbon Pools and greenhouse gases would underestimate total emission reductions.</li> </ul> <p>[Description of Carbon Pools and greenhouse gases selected – 8.2]</p>	<p><b>YES</b></p>
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Carbon pools that are excluded in the ER Program are Soil Organic Carbon and Dead Organic Matter. The gases excluded are CH<sub>4</sub> and N<sub>2</sub>O.

Sufficient argumentation is provided in the ERPD to establish that their exclusion would underestimate total emissions reductions. And in some cases the decision is supported by the quantification of their emissions, resulting to amount to less than 10% of total forest-related emissions in the accounting area during the reference period.

**C. 5 The ER Program uses the most recent Intergovernmental Panel on Climate Change (IPCC) guidance and guidelines, as adopted or encouraged by the Conference of the Parties as a basis for estimating forest-related greenhouse gas emissions by sources and removals by sinks.**

<p><b>Ind. 5.1</b> The ER Program identifies the IPCC methods used to estimate emissions and removals for Reference Level setting and Measurement, Monitoring and reporting (MMR).</p> <p>[Description of method used for calculating the average annual historical emissions over the Reference Period – 8.3]</p> <p>[Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area– 9.1]</p>	<p><b>YES</b></p>
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The ERPD clearly identifies the methodology to assess emissions, which is the one described in IPCC 2006. The methodology is applied to forest land converted to other land use (mainly croplands) and consists in the multiplication of activity data by emissions factors.

It is also presented the methods used to obtain the activity data (land use change) and emissions factors (difference of carbon stocks before and after deforestation). The data used for the present document are tier 2 (country specific data or country level estimates) or tier 3 (data specifically produced for the ER Program). Activity data are produced on the reference period with spatially explicit method based on available satellites images. Emissions factors are derived from literature or forest inventory in the accounting area. As analysis is done over the reference period, long term (10 years) changes (increase or decrease) of carbon stocks on deforested areas (land converted to another land use) are considered instead of annual increase or decrease.

The document is transparent enough to re-do the calculations of the reference level.

MMR section does also explain the methods that will be used to update activity (AD) data and emissions factors (EF). AD will be the one developed at national level with extraction of results for the ER Program area. For the MRV purposes in the National Forest Monitoring System, new tools and algorithms improving results will be evaluated and considered. In relation to EF, they will be updated every year with the survey of half of the national network of permanent plots created for the NFI (48 over 96 plots including 22 plots in Semi-deciduous forests and 12 in Evergreen forests) and the National Forest Inventory (NFI) will be updated every 10 years. For the NFI, a total of 620 clusters of inventory plots will be realized across the country in all strata.

**C. 6 Key data and methods that are sufficiently detailed to enable the reconstruction of the Reference Level, and the reported emissions and removals (e.g., data, methods and assumptions), are documented and made publicly available online. In cases where the country's or ER Program's policies exempt sources of information from being publicly disclosed or shared, the information should be made available to independent reviewers and a rationale is provided for not making these data publicly available. In these cases, reasonable efforts should be made to make summary data publicly available to enable reconstruction.**

<p><b>Ind. 6.1</b> The following methodological steps are made publicly available:</p> <ol style="list-style-type: none"> <li>I. Forest definition;</li> <li>II. Definition of classes of forests, (e.g., degraded forest; natural forest; plantation), if applicable;</li> <li>III. Choice of activity data, and pre-processing and processing methods;</li> <li>IV. Choice of emission factors and description of their development;</li> <li>V. Estimation of emissions and removals, including accounting approach;</li> <li>VI. Disaggregation of emissions by sources and removal by sinks;</li> <li>VII. Estimation of accuracy, precision, and/or confidence level, as applicable;</li> <li>VIII. Discussion of key uncertainties;</li> <li>IX. Rationale for adjusting emissions, if applicable;</li> <li>X. Methods and assumptions associated with adjusting emissions, if applicable.</li> </ol> <p>[Forest definition used in the construction of the Reference Level 9.2]  [Description of method used for calculating the average annual historical emissions over the Reference Period 8.3]  [Activity data &amp; emission factors used for calculating the average annual historical emissions over the Ref. Period 8.3]  [Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area 9.1]</p>	<p><b>YES</b></p>
<p>The TAP experts found the ERPD complete and transparent when presenting the information listed above:</p> <ul style="list-style-type: none"> <li>Forest definition and forest classes are presented in chapter 8.2 of the ERPD. Forest in Mozambique and in the ER Program is defined as followed: minimum surface of 1 ha, minimum height at maturity of 5 m and minimum coverage of tree of 30%.</li> </ul>	

<ul style="list-style-type: none"> <li>Choice of activity AD in chapter 8.3 of the ERPD, includes the pre-processing and processing methods. The results from the point sampling analysis are the annual areas of deforestation over the reference period that have been extracted from national database for the ER Program accounting area.</li> <li>Description of development of Emission factors is included in chapter 8.3. Field inventories have been carried out to estimate aboveground biomass in Miombo forest. Allocation of sample plots, methodology for field measurement, assumptions take and final results are presented in the ERPD. The MRV Unit in FNDS is currently conducting a National Forest Inventories (NFI). When results are available for the strata that are present in the ER Program area, at the first monitoring event (2018), they will replace the EF used, in order to be consistent with national level. Methods used for the NFI are described in section 9 (MRV).</li> <li>Deforestation emissions are presented including accounting approach and disaggregated by sources.</li> <li>Activity data and emission factors present the confidence interval (90%) and a complete analysis of the uncertainty is presented in chapter 12 of the ERPD ("Uncertainties of the calculation of emissions reductions")</li> </ul>	
<p><b>Ind 6.2</b> For the following spatial information, maps and/or synthesized data are displayed publicly, and reasonable efforts are made to explain how these were derived from the underlying spatial and other data, and to make key data sets or analyses publicly available:</p> <ol style="list-style-type: none"> <li>Accounting Area</li> <li>Activity data (e.g., forest-cover change or transitions between forest categories)</li> <li>Emission factors</li> <li>Average annual emissions over the Reference Period</li> <li>Adjusted emissions</li> </ol> <p>Any spatial data used to adjust emissions, if applicable.</p> <p>[Forest definition used in the construction of the Reference Level 9.2]  [Description of method used for calculating the average annual historical emissions over the Reference Period 8.3]  [Activity data &amp; emission factors used for calculating the average annual historical emissions over the Ref. Period 8.3]  [Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area 9.1]</p>	<p><b>YES</b></p>
<p>The TAP experts found that Emissions Reduction Program Document presents in a publicly available format the information related to accounting area, activity data and emission factors that result in the average annual emissions over the reference period.</p> <p>Geographical information of the land use change is provided in tabular format for the Technical Advisory Panel analysis and detailed explanations are provided in the ERPD to understand how it was derived. Allocation of forest inventories plots used for the determination of the EF is presented in the document and detailed information is provided on how field measurements were taken. However, the results obtained for Miombo forest is not consistent with international literature available. The analysis of the discrepancy is done in following indicators.</p> <p>Average annual emission over the reference period (chapter 8.3) is the result of the previously detailed information, provided in the ERPD. Upward or downward adjustments to the average annual historical emissions over the reference period are not applicable to this ER Program.</p>	
<p><b>C.7 Sources of uncertainty are systematically identified and assessed in Reference Level setting and Measurement, Monitoring and reporting</b></p>	
<p><b>Ind 7.1</b> All assumptions and sources of uncertainty associated with activity data, emission factors and calculation methods that contribute to the uncertainty of the estimates of emissions and removals are identified.</p>	<p><b>YES</b></p>

<p>[Activity data and emission factors used for calculating the average annual historical emissions over the Reference Period 8.3]</p> <p>[Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area 9.1]</p> <p>[Identification and assessment of sources of uncertainty 13.1]</p>	
<p>Activity data used for the estimation of Forest Emission Reference Level is derived from the national FREL/FRL that uses a point sampling method. Historical reference level will use the same source during ERPA.</p> <p>It is based on the regular national 4x4km grid and has been designed and conducted using the high and medium resolution images repository available through Google Earth and Earth Engine. Possible sources of uncertainties associated with the production of the historical AD for deforestation and production of the LULC reference map could be related to the quality of images used and the interpretation of operators and sampling design. An assessment and contribution of sources of uncertainties as well as steps to minimize uncertainties is presented in the document. Quantification of uncertainty for activity data is done with approach 1 of the IPCC (2006) using the propagation of error method.</p> <p>Uncertainty of the emission factors are related to the estimation of carbon stocks. The main sources of uncertainty are identified: measurement errors, standard factors, allometric model error and sampling error. There are also steps to minimize uncertainty.</p> <p>It is important to clarify that the emission factors used in the quantification of the reference level were obtained with dedicated field inventories while emission factors that will be used for MMR (and actualization of the historical Reference level) will be obtained from the National Forest Inventory. These emission factors for historical reference level are obtained from the difference between pre and post-deforestation carbon stocks in above and belowground biomass. Aboveground biomass in pre-deforested areas in Miombo forest is 241.6 tCO<sub>2</sub>/ha (90% CI 17.1 tCO<sub>2</sub>/ha = 7%), according to the inventories mentioned above. TAP experts have found international aboveground biomass carbon stocks for Miombo in Mozambique and are similar to what is presented in ZILMP Program. This same emission factor is also used in Gile National Reserve REDD Project which has already been verified by international auditors and achieved the emission of carbon credits.</p> <p>Uncertainty of the emission factors used in the construction of the reference level were estimated through the variability of carbon stocks calculated with the allometric equation and estimated with the standard deviation of results associated to the average used for both forest inventories for pre- and post-deforestation on Semi-deciduous forests (Miombo forest). However, there are other sources of uncertainty that are not analyzed, for example, the representativeness of Miombio forest to semi-deciduous stratum and Montane forest to evergreen stratum, the allocation of transects for biomass measurement (100 plots) within Miombo forest seems not to be allocated randomly, or the uncertainty associated to the application of the same post-deforestation AGB and BGB values for Miombo and Mountainous forest. Notwithstanding, the lately mentioned factors would not represent a major impact in the overall uncertainty. Moreover, as mentioned before, this emission factors will be replaced with the results from National Forest Inventory.</p> <p>The REL is the result of (i) the multiplication of activity data and emission factors for the estimation of emissions related to each forest strata and (ii) the addition of all emissions from different strata and sources. Uncertainties were calculated using the method of propagation of errors. Results are presented in the following table. The overall level of uncertainties is 15% with 90% confidence interval, corresponding to mean annual emissions of 10,220,558tCO<sub>2</sub>e/yr +/-1,522,387.</p>	
<p><b>Ind 7.2</b> The sources of uncertainty identified in Indicator 7.1: are assessed for their relative contribution to the overall uncertainty of the emissions and removals.</p> <p>[Identification and assessment of sources of uncertainty 13.3]</p>	<p><b>YES</b></p>
<p>As it was mentioned above, the ERPD identifies in a qualitative and quantitative way the main sources of uncertainties. Not only is their relative contribution to the overall uncertainty of the emissions assessed, but also the steps to minimize them.</p>	

**C 8 The ER Program, to the extent feasible, follows a process of managing and reducing uncertainty of activity data and emission factors used in Reference Level setting and Measurement, Monitoring and reporting.**

**Ind 8.1** Systematic errors are minimized through the implementation of a consistent and comprehensive set of standard operating procedures, including a set of quality assessment and quality control processes that work within the local circumstances of the ER Program.

**YES**

[Activity data and emission factors used for calculating the average annual historical emissions over the Reference Period, 13.2]

[Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area]

Along the ER Program Document, different quality controls procedures are identified, that makes the TAP understand that the indicator is accomplished.

In the production method of activity data (point sampling method used at national level) it is said that the entire area of the country has been visually assessed. 48,894 nodes have been visually evaluated and their information collected in a complete database on LULC changes at the national level. Five trained operators have carried out the activity in approximately 98 effective working days (4.4 months). At jurisdictional level, this corresponds to 3,308 points being interpreted. The quality control has been performed through a random sample of a 10% of the nodes assessed by the various operators - that is, 4,889 nodes at national level.

Emissions factor for the historical reference level is obtained from dedicated inventories for this purpose. The method followed for this inventory is described in Background study for the preparation of the Zambézia Integrated Landscapes Management Program, Report for the Government of Mozambique and FCPF - Etc Terra, Mercier et al. (2016) (not included in the ERPD) but it does not consider standard operating procedures or quality control processes to reduce systematic or random error.

Emissions factors that will be used for MRV and to update the historical reference level will be obtained from the National Forest Inventory (NFI). Quality control and quality assurance of the NFI is not specified in the ER Program Document. However, the TAP team had access to the National Forest Inventory Guidelines and other documents and it is inferred that the emissions factors will be obtained through the implementation of a consistent and comprehensive set of standard operating procedures, minimizing systematic and random errors.

**Ind 8.2** Random errors and other uncertainties are minimized to the extent practical based on the assessment of their relative contribution to the overall uncertainty of the emissions and removals.

**YES**

[Activity data and emission factors used for calculating the average annual historical emissions over the Reference Period 10, 13]

[Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area 9.1]

[Identification and assessment of sources of uncertainty 13.1]

When the ERPD identifies and assess the sources of uncertainty of activity data, establishes that errors related to the interpretation of sample points would be systematic and random. And those uncertainties are related and cannot be analyzed independently.

Also, an overall assessment of the uncertainties and their relative contribution to the overall uncertainty of the emissions is performed in chapter 12 "Uncertainty of the calculation of emissions reductions". Uncertainties have been minimized through the application of QC/QA procedures. To reduce interpretation errors during creation of training plots or during the validation procedure, the following measures were taken:

- Interpretations are done by remote sensing experts, fully trained to these methods and knowing the field conditions;



- Several operators were mobilized to avoid bias due to wrong interpretation of an individual;
- The use of various scripts programmed on Earth Engine Code facilitate the interpretation of the vegetation type and the determination of LULC changes, specifically the MODIS NDVI trend

The measures to minimize uncertainties for the establishment of EF for the Program RL are the following:

- Measurements in the field were realized by a team that has significant experience on such inventories and composed of a botanic specialized in Miombo forest;
- The allometric equation was chosen after having compared the conditions of application of all available in order to choose the most suitable one;
- The sampling plan was designed (i) to have a minimum number of plots calculated to represent variability on carbon stocks with the tool developed by Winrock and (ii) to be representative of the variability of conditions in the Miombo forest strata by spreading the most homogeneously plots on forests of the ZILMP accounting area and by distributing plots in transect of four in order to account for micro-topographic variations.

During the MRV, the uncertainties will be minimized through the employment of a trained team that will be the same doing regularly the measurements in permanent plots and managing the NFI. The sampling design for the NFI and permanent plots will stay the same as it is considered to be representation of all strata at national level. It has been designed to account for the variation in carbon stocks of the main strata as presented in the following table. Moreover, the choice of allometric equations for the NFI will be based on the comparison of all equations existing for Mozambique to select the most relevant for each stratum.

Given the information provided in the ERPD and mentioned above, the TAP understands that the indicator is accomplished. We would encourage the country to improve the analysis by performing an assessment (qualitative and/or quantitative) of each variable in relation to [their relative contribution to the overall uncertainty of the emissions](#).

**C 9 Uncertainty of activity data and emission factors used in Reference Level setting and Measurement, Monitoring and reporting is quantified in a consistent way, so that the estimation of emissions, removals and Emission Reductions is comparable among ER Programs**

**Ind 9.1** Uncertainty associated with activity data and emission factors is quantified using accepted international standards, for example by providing accuracy, confidence interval, distribution of error, and propagation of error. Where errors in data and methods are considered large as defined in IPCC Guidelines, Monte Carlo methods (numerical simulations) should be used to estimate uncertainty

[Activity data and emission factors used for calculating the average annual historical emissions over the Reference Period 13.1]

[Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area 9.1]

**YES**

The uncertainties of the REL were calculated following the approach 1 of IPCC (2006) using the propagation of error method. Confidence intervals were assumed symmetrical in all cases. Two uncertainties were calculated for activity data and emissions factors before assessing global uncertainty related to the RELs.

For the global rate of deforestation (35,061 ha/yr) on the ER Program accounting area, the 90% CI is 4,801 ha/yr corresponding to an error of 13.7%.

In relation to the uncertainty associated to emissions factors, total error in semi-deciduous forest (Miombo) is 12% and in Evergreen forest (Montane forest) is 13%.

The REL is the result of (i) the multiplication of activity data and emission factors for the estimation of emissions related to each forest strata and (ii) the addition of all emissions from different strata and sources. Uncertainties were calculated using the method of propagation of errors. The overall level of uncertainties is 15% at the 90% confidence interval, corresponding to mean annual emissions of 10,220,558 tCO<sub>2</sub>e/yr is 1,522,387 tCO<sub>2</sub>e/yr.

<p>As described in IPCC 2006, the following steps will be realized:</p> <ul style="list-style-type: none"> <li>• The different parameters to which uncertainties are associated will be identified and corresponding Probability Density Functions (PDF) will be defined (for activity data and carbon stocks, data distribution is usually normal) with mean and standard deviation;</li> <li>• For each of these parameters, random values (at least 1,000) will be generated following the shape of PDF;</li> <li>• Emissions will be calculated from those random values, for the same number of values, and, mean and uncertainties (90% CI) will be calculated from these estimations;</li> <li>• The process will be repeated until mean and uncertainties of emissions remain stable</li> </ul> <p>Since errors in data and methods are not considered large, Monte Carlo methods are not necessary. However, during monitoring events, ER and associated uncertainties will be calculated using a Monte Carlo analysis (approach 2 of IPCC). Notwithstanding, there is a proportion of ERs to be set aside because of uncertainties that is 4% because the level of uncertainties is at the threshold of 15%</p>	
<p><b>Ind 9.2</b> Uncertainty of the estimate of Emission Reductions is quantified using Monte Carlo methods. Underlying sources of error in data and methods for integrated measurements of deforestation, forest degradation and enhancements (e.g., as in a national forest inventory) are combined into a single combined uncertainty estimate and are reported at the two-tailed 90% confidence level</p> <p>[Quantification of uncertainty in Reference Level setting 13.2]</p>	<b>N.A</b>
N/A	
<p><b>Ind 9.3</b> Uncertainty of Emissions Reductions associated with deforestation, forest degradation and enhancements are reported separately if measured through separate (i.e., non-integrated) approaches and when degradation is estimated using proxy data.</p> <p>[Quantification of uncertainty in Reference Level setting 13.2]</p>	<b>N.A</b>
N/A	
<p><b>C 10 The development of the Reference Level is informed by the development of a Forest Reference Emission Level or Forest Reference Level for the UNFCCC</b></p>	
<p><b>Ind 10.1</b> The Reference Level is expressed in tons of carbon dioxide equivalent per year</p> <p>[Estimated Reference Level 9.7]</p>	<b>YES</b>
<p>The Reference Level from forest deforestation in ZILMP ER Program is 10,220,558 tons of carbon dioxide equivalent per year. The reference period is between 2005 and 2015. Uncertainty is 15% at the 90% confidence interval</p>	
<p><b>Ind 10.2</b> The ER Program explains how the development of the Reference Level can inform or is informed by the development of a national Forest Reference Emission Level or Forest Reference Level, and explains the relationship between the Reference Level and any intended submission of a Forest Reference Emission Level or Forest Reference Level to the UNFCCC</p> <p>[Relation between the Reference Level, the development of a FREL/FRL for the UNFCCC and the country's existing or emerging greenhouse gas inventory 9.8]</p>	<b>YES</b>

<p>Through the entire ERPD and in a dedicated section, the document explains the relation between the Reference Level and the development of a national Forest Reference Emission Level or Reference Level.</p> <p>The program Reference Level is fully aligned with the national FREL/FRL because it was built in that purpose. Activity data of the RL are an extraction of the FREL/FRL for the emissions due to deforestation. Other sources of emissions will be assessed (such as degradation) in the process of the development of the FREL.</p> <p>Emissions factors for the current program RL and the FREL/FRL are not estimated with the same method: 100 plots were measured for RL and the National FREL will use data from NFI. It is difficult to know if results will be comparable as some decisions still need to be made at national level such as the allometric equations that will be used. However, at the first monitoring event, once the NFI is completed, emissions factors for the ER Program will also be updated with carbon stocks of the significant pools from the NFI (results available in 2018).</p>	
<p><b>Ind 10.3</b> The ER Program explains what steps are intended in order for the Reference Level to achieve consistency with the country's existing or emerging greenhouse gas inventory</p> <p>[Relation between the Reference Level, the development of a FREL/FRL for the UNFCCC and the country's existing or emerging greenhouse gas inventory 9.6]</p>	YES
<p>There is an existing GHG from 1990 and the last greenhouse gas inventory of Mozambique dates from 1994. The MRV unit of the FNDS is currently updating this inventory, by using the results of the FREL/FRL for the LULUCF/LUCF emissions linked to deforestation or forest degradation.</p>	
<p><b>C 11 A Reference Period is defined</b></p>	
<p><b>Ind 11.1</b> The end-date for the Reference Period is the most recent date prior to two years before the TAP starts the independent assessment of the draft ER Program Document and for which forest-cover data is available to enable IPCC Approach 3. An alternative end-date could be allowed only with convincing justification, e.g., to maintain consistency of dates with a Forest Reference Emission Level or Forest Reference Level, other relevant REDD+ programs, national communications, national ER program or climate change strategy</p> <p>[Reference Period 9.1]</p>	YES
<p>The end-date for the Reference Period is "the most recent date prior to two years before the TAP starts the independent assessment of the draft ER Program Document or which forest-cover data is available to enable IPCC Approach 3".</p> <p>The TAP assessment is taken place in 2017, thus the end date for the ER Program Reference Period should be 2015. In addition. Activity data is produced for the reference period (and beyond it) with spatially explicit method based on available satellites images, which corresponds to a <i>tier</i> 3 approach.</p> <p>The end-date selected for the ZILMP ERPD is in compliance with the Methodological Framework from the Forest Carbon Partnership Facility.</p>	
<p><b>Ind 11.2</b> The start-date for the Reference Period is about 10 years before the end-date. An alternative start-date could be allowed only with convincing justification as in Indicator 11.1, and is not more than 15 years before the end-date.</p> <p>[Reference Period 9.1]</p>	YES
<p>The start date of the Reference Period has to be 10 years (up to 15 years with convincing justification) before the end date of the Reference Period. As a consequence, the Reference Period used in the construction of the Reference Level should start in 2005.</p>	

It should be noted that Mozambique is currently developing a thorough analysis of historical deforestation in order to establish its national FREL/FRL. This analysis is composed of a historical analysis of deforestation and of the production of a LULC map with Sentinel 2 images to delimitate forest strata and produce Activity Data.

In order to guarantee full alignment of the jurisdictional reference level with the national FREL, the data produce at national level are used in the present document. The program RL and MRV system is based on the national FREL/FRL and NFMS (National Forest Monitoring System). The historical analysis of Activity Data at national level uses the reference period 2001-2016 and the MRV system will be based on the LULC reference map produced with 2016 Sentinel-2 and Landsat data (most recent date for which forest-cover data is available to enable IPCC Approach 3). Thus, data for the ER Program RL have been extracted from national FREL/FRL for the Program accounting area and for the period 2005-2015.

## C 12 The forest definition used for the ER Program follows available guidance from UNFCCC decision 12/CP.17

**Ind 12.1** The definition of forest used in the construction of the Reference Level is specified. If there is a difference between the definition of forest used in the national greenhouse gas inventory or in reporting to other international organizations (including an Forest Reference Emission Level or Forest Reference Level to the UNFCCC) and the definition used in the construction of the Reference Level, then the ER Program explains how and why the forest definition used in the Reference Level was chosen.

YES

[Forest definition used in the construction of the Reference Level 9.2]

According to the national REDD+ strategy and to the Final Report on Forest Definition (Falcão and Noa, 2016) approved by MITADER (Ministério da Terra, Ambiente e Desenvolvimento Rural) in November 2016, forest in Mozambique is defined as followed:

- minimum area of 1 ha,
- minimum height at maturity of 5 m and
- minimum coverage of tree of 30%.

This definition is the one used in the ERPD Program and in the national FREL. As a consequence, for the production of deforestation map, minimum mapping unit was 1 ha.

This definition is the same used by the country within the UNFCCC for Clean Development Mechanisms. In fact, there a Reforestation CDM Project in Niassa Province that uses the same definition. There is no available information to determine if the same definition has been used or will be used in GHG National Inventories.

Forest strata selected in the ERPD are based on the definition used in the FREL at national level and on the available data for carbon stocks estimation. For the historical AD analysis, forests strata have been merged in 2 strata, since the NFI is not yet finished and carbon stocks estimation from dedicated inventories or bibliography are only available for few strata. They are: Semi-deciduous forests and Evergreen forests. According to the national classification, for the historical analysis of Activity Data, the following forest strata have been considered:

- Semi-deciduous forests in the ER Program area: open and dense Miombo and open and dense Mopane forests;
- Evergreen forests in the ER Program area: open and close montane forests, open and closed coastal forests and gallery forests;
- Mangroves are present in the ZILMP area but during the analysis of deforestation, no land use change points were observed in this stratum: it is therefore ignored in the reference level.

The definition of strata will be updated during the first monitoring event when results from the LULC benchmark map and the NFI will be available. Strata -with significantly different carbon stocks- will be defined on the basis of those results to stratified forest of the ZILMP accounting area.

<b>C 13 The Reference Level does not exceed the average annual historical emissions over the Reference Period. For a limited set of ER Programs, the Reference Level may be adjusted upward by a limited amount above average annual historical emissions. For any ER Program, the Reference Level may be adjusted downward.</b>	
<p><b>Ind 13.1</b> The Reference Level does not exceed the average annual historical emissions over the Reference Period, unless the ER Program meets the eligibility requirements in Indicator 13.2. If the available data from the National Forest Monitoring System used in the construction of the Reference Level shows a clear downward trend, this should be taken into account in the construction of the Reference Level</p> <p>[Average annual historical emissions over the Reference Period 9.6, 13.2]</p>	<b>YES</b>
<p>The Reference Level does not exceed the average annual historical emissions over the Reference Period.</p> <p>The Reference level uses different activity data from the reference period that were averaged to produce annual deforestation areas over the whole period. Emissions factors are derived from literature or forest inventory in the accounting area. The analysis is done over the reference period, long term (10 years) changes (increase or decrease) of carbon stocks on deforested areas (land converted to another land use) instead of annual increase or decrease.</p> <p>The total emissions over the Reference Period are 10,220,558 tons of carbon dioxide equivalent per year. The reference period is between 2005 and 2015. Uncertainty is 15% at the 90% confidence interval.</p>	
<p><b>Ind 13.2</b> The Reference Level may be adjusted upward above average annual historical emissions if the ER Program can demonstrate to the satisfaction of the Carbon Fund that the following eligibility requirements are met:</p> <p>(i) Long-term historical deforestation has been minimal across the entirety of the country, and the country has high forest cover (country or jurisdictional area);</p> <p>(ii) National circumstances have changed such that rates of deforestation and forest degradation during the historical Reference Period likely underestimate future rates of deforestation and forest degradation during the Term of the ERPA.</p> <p>[Explanation and justification of proposed upward or downward adjustment to the average annual historical emissions over the Reference Period, Quantification of the proposed upward or downward adjustment to the average annual historical emissions over the Reference Period 9.6].</p>	<b>N.A</b>
<p><b>N/A</b></p> <p>[Short assessment. It may be non applicable if the ER-program does not meet the eligibility criteria]</p>	
<p><b>Ind 13.3</b> For countries meeting the eligibility requirements in Indicator 13.2, a Reference Level could be adjusted above the average historical emission rate over the Reference Period. Such an adjustment is credibly justified on the basis of expected emissions that would result from documented changes in ER Program circumstances, evident before the end-date of the Reference Period, but the effects of which were not fully reflected in the average annual historical emissions during the Reference Period. Proposed adjustments may be rejected for reasons including, but not limited to:</p> <p>i. The basis for adjustments is not documented; or</p> <p>ii. Adjustments are not quantifiable.</p> <p>[Explanation and justification of proposed upward or downward adjustment to the average annual historical emissions over the Reference Period, Quantification of the proposed upward or downward adjustment to the average annual historical emissions over the Reference Period 9.6]</p>	<b>N.A</b>

<b>N/A</b> [Short assessment. It may be non applicable if the ER-program does not meet the eligibility criteria]	
<b>Ind 13.4</b> An adjustment of the Reference Level above the average annual historical emissions during the Reference Period may not exceed 0.1%/year of Carbon Stocks  [Explanation and justification of proposed upward or downward adjustment to the average annual historical emissions over the Reference Period, Quantification of the proposed upward or downward adjustment to the average annual historical emissions over the Reference Period 9.6]	<b>N.A</b>
<b>N/A</b> [Short assessment. It may be non applicable if the ER-program does not meet the eligibility criteria]	
<b>C 14 Robust Forest Monitoring Systems provide data and information that are transparent, consistent over time, and are suitable for measuring, reporting and verifying emissions by sources and removals by sinks, as determined by following Criterion 3 within the proposed Accounting Area</b>	
<b>Ind 14.1</b> The ER Program monitors emissions by sources and removals by sinks included in the ER Program's scope (Indicator 3.1) using the same methods or demonstrably equivalent methods to those used to set the Reference Level.  [Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area 10.1]	<b>YES</b>
<p>The ER Program monitors emissions by sources included in the ER Program's scope (deforestation) using the same methods for activity data and emission factors, to those used to set the Reference Level. The methods are obtained from IPCC (see indicator 5.1)</p> <p>The methods used to obtain the activity data will be continued during the MMR: the analysis of AD with Google Earth Engine will be repeated in order to make possible the comparison with the results of the MRV method and the one of the FREL. For the MRV purposes in the National Forest Monitoring System, new tools and algorithms improving results will be positively valued and considered, to be used in the monitoring period and to actualize the historical reference level. On the other hand, data is developed at national level with extraction of results for the ER Program area. As for the FREL/FRL, LULC maps during the M&amp;MRV will be produced with Sentinel-2 and Landsat-8 mosaic of images with 3 spatial resolutions (10, 20 and 30 m) on the entire country territory. For the monitoring of AD, the entire area of the country will be visually assessed on the same 4 x 4 km grid, by using also the mosaic of Landsat 8 and Sentinel-2 images. Based on the production of LULC map, AD will be updated every 2 years (consistent with the biennial reporting set under the UNFCCC), but the MRV Unit (FNDS) will generate annual reporting capacity. The method at national level to monitor AD is based on the comparison of LULC map at 2 dates, starting with the LULC benchmark map of 2016. LULC changes map will be produced once the LULC 2016 benchmark map will be finalized.</p> <p>The methods used to obtain the emission factors for the estimation of the historical emission reductions will change. The ERPD currently uses emissions factors from dedicated forest inventories (100 plots) in Miombo forest and emissions factors obtained from literature for Evergreen forest. However, a National Forest Inventory is being developed and new emission factors will be obtained soon.</p>	



With the results from the NFI, the emission factors could be updated and it will be possible to calculate the carbon content for aboveground (AGB) and below-ground biomass (BGB), dead organic matter (litter and dead wood) (DOM) and soil pools (SOC) by vegetation type/ land use in 2018. According to the ERPD, if carbon pools that are not included in the present document happen to be significant, they will be integrated in the RL that will be revised for the next MRV phase, once results from the NFI are available. The TAP wishes to comment that this is not currently possible in the MF of the Carbon Fund: the activities and pools presented at this stage are the ones used for the entire Program. Moreover, national average for the strata of interest in the ER Program area (Miombo, Mopane, Montane and Coastal forests) will be used to update EF of the RL for the next MRV session of the ER program in order to guarantee consistency with national FREL. In 2018, AD and EF of each stratum identified on the LULC map in the ER Program area will be accounted for and updated if the carbon stocks between strata are significantly different. Otherwise, strata will be merged as it has been done in the present document (Semi-deciduous forest for Miombo and Mopane forests for example).

**Ind 14.2** Activity data are determined periodically, at least twice during the Term of the ERPA, and allow for ERs to be estimated from the beginning of the Term of the ERPA. Deforestation is determined using IPCC Approach 3. Other sinks and sources such as degradation may be determined using indirect methods such as survey data, proxies derived from landscape ecology, or statistical data on timber harvesting and regrowth if no direct methods are available

YES

[Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area 9.1]

LULC maps will be prepared every 2 years for MRV in order to monitor the implementation of the mitigation activities and their impact.

As for the FREL/FRL, LULC maps during the M&MRV will be produced with Sentinel-2 and Landsat-8 mosaic of images with 3 spatial resolutions (10, 20 and 30 m) on the entire country territory and 2 dates in the year will be analyzed: (i) in May/June, when the cloud cover is reduced but the trees of dry Miombo have lost their leaves; (ii) in August/September to confirm first classification with trees having their new leaves but higher cloud cover. For the monitoring of AD, the entire area of the country will be visually assessed on the same 4 x 4 km grid, by using also the mosaic of Landsat 8 and Sentinel-2 images.

Based on the production of LULC map, AD will be updated every 2 years (consistent with the biennial reporting set under the UNFCCC), but the MRV Unit (FNDS) will generate annual reporting capacity. The method at national level to monitor AD is based on the comparison of LULC map at 2 dates, starting with the LULC benchmark map of 2016. LULC changes map will be produced once the LULC 2016 benchmark map will be finalized. In the meantime, the analysis of AD with Google Earth Engine will be repeated in order to make possible the comparison with the results of the MRV method and the one of the FREL.

As stated in 2006 IPCC Guidelines for National Greenhouse Gas Inventories, Approach 3 is characterized by spatially-explicit observations of land-use categories and land-use conversions, often tracking patterns at specific point locations and/or using gridded map products, such as derived from remote sensing imagery. The data can be obtained by various sampling, which is the case of ZILMP Program.

**Ind 14.3** Emission factors or the methods to determine them are the same for Reference Level setting and for Monitoring, or are demonstrably equivalent. IPCC Tier 2 or higher methods are used to establish emission factors, and the uncertainty for each emission factor is documented. IPCC Tier 1 methods may be considered in exceptional cases

YES

[Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area 10.1]

The methods used to obtain the emission factors for the estimation of the historical emission reductions will change. The ERPD currently uses emissions factors from dedicated forest inventories (100 plots) in Miombo forest and emissions factors obtained from literature for Evergreen forest. The TAP compared these emission factors with international

literature and found that are reasonable and coherent. However, a National Forest Inventory is being developed and new emission factors will be obtained soon, that will also be used to actualize the historical reference level.

With the results from the NFI, the emission factors could be updated and it will be possible to calculate the carbon content for aboveground (AGB) and below-ground biomass (BGB), dead organic matter (litter and dead wood) (DOM) and soil pools (SOC) by vegetation type/ land use in 2018. According to the ERPD, if carbon pools that are not included in the present document happen to be significant, they will be integrated in the RL that will be revised for the next MRV phase, once results from the NFI are available. The TAP wishes to comment that this is not currently possible in the MF of the Carbon Fund: the activities and pools presented at this stage are the ones used for the entire Program.

National average for the strata of interest in the ER Program area (Miombo, Mopane, Montane and Coastal forests) will be used to update EF of the RL for the next MRV session of the ER program in order to guarantee consistency with national FREL. In 2018, AD and EF of each stratum identified on the LULC map in the ER Program area will be accounted for and updated if the carbon stocks between strata are significantly different. Otherwise, strata will be merged as it has been done in the present document (Semi-deciduous forest for Miombo and Mopane forests for example).

The emissions factors will be updated every year with the survey of half of the national network of permanent plots created for the National Forest Inventory (48 over 96 plots) and the NFI will be updated every 10 years. For the NFI, a total of 620 clusters of inventory plots will be realized across the country in all strata.

Despite that the actual emission factors used in the Reference level setting will not be the same for MRV, the methods used to obtain both are demonstrably equivalent as they are based on forestry monitoring practices. In addition to that, when the results from NFI are obtained, the emission factors will be actualized and historical reference level emission factors will be identically the same as the emission factors used for monitoring.

#### **C 15 ER Programs apply technical specifications of the National Forest Monitoring System where possible**

**Ind 15.1** ER Programs articulate how the Forest Monitoring System fits into the existing or emerging National Forest Monitoring System, and provides a rationale for alternative technical design where applicable.

[Relation and consistency with the National Forest Monitoring System 10.3]

**YES**

The ZILMP ER Program fully articulates the Forest Monitoring with the NFMS (National Forest Monitoring system), which is being developed at national level by the MRV team in the FNDS.

For the ER Program, the activity data and the emissions factors will be extracted from the results of the NFMS on the same frequency for the sources and sinks and carbon pools considered in the program. The NFMS is composed of:

- The National Forest Inventory: the results from the first inventory will be available in the beginning of 2018 and the NFI will be updated every 10 years. It will monitor all carbon pools for all selected class of vegetation types associated with deforestation, forest degradation and enhancement of carbon stocks;
- The Activity Data monitoring system: it is expected to periodically update the analysis of activity data – every 2 years - and the National Land Cover Map. Since enhancement of carbon stocks is excluded for the ER Program, only data for deforestation and degradation will be extracted from national MRV.

As it is stated in the ERPD, the implementation of the M&MRV is coordinated by the UT-REDD+ (Redd+ Technical Unit) and implemented by the MRV team at the FNDS (National Fund for Sustainable Development) with support from the Department of Natural Resources Inventory (DIRN). The MRV team is currently trained during the establishment of the national FREL/FRL. A complete geospatial laboratory has been designed and purchased in the framework of the R-Package development.

The ERPD does also clarify the exact organizational structure for measurement, monitoring and reporting. The previous comments and this organizational structure clearly indicate the accomplishment of the indicator.

<b>C 16 Community participation in Monitoring and reporting is encouraged and used where appropriate</b>	
<p><b>Ind 16.1</b> The ER Program demonstrates that it has explored opportunities for community participation in monitoring and reporting, e.g., of ER Program Measures, activity data, emission factors, safeguards and Non-Carbon Benefits, and encourages such community participation where appropriate</p> <p>[Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area 10.1, 10.3]</p>	<b>YES</b>
<p>Yes . The host country <u>explored the opportunities for community participation in MRV</u>. The ERPDP dedicates a complete section in chapter 9.1 (MRV) that analyzes those possibilities, this section has been improved by the host country and efforts have been made. Nevertheless the TAP recommends that the Report of the Participatory MRV could be effectively tested during the next stages of the Program.</p> <p>At the date of this TAP Assessment Report the Participatory MRV is still in the planning stage and is to be tested only in one year from now ( in 2018). The Safeguards Information System (SIS) is also still in the planning stage and not yet functional or fully defined. For that reason the system will rely on the Web Portal for MRV REDD+ in Mozambique, which is being designed by the MRV Unit in the FNDS.</p> <p>Taking this in consideration the Criteria is met with recommendations.</p>	
<b>C 17 The ER Program is designed and implemented to prevent and minimize potential displacement</b>	
<p><b>Ind 17.1</b> Deforestation and degradation drivers that may be impacted by the proposed ER Program measures are identified, and their associated risk for displacement is assessed, as well as possible risk mitigation strategies. This assessment categorizes Displacement risks as high, medium or low.</p> <p>[Identification of risk of Displacement 11.1]</p>	<b>YES</b>
<p>The ZILMP Program identifies the deforestation drivers that may be impacted by the proposed ER Program measures. At first stage, every driver is analyzed with the assessment of their risk for displacement (low, medium or high), the detection of the main agent (local population, industrials, concessionaires, etc.), the explanation or justification of its assessment and their level of significance in the ER Program area.</p> <p>The main drivers of deforestation are:</p> <ul style="list-style-type: none"> <li>• Small scale agriculture based on “slash and burn” techniques</li> <li>• Charcoal production and</li> <li>• Unsustainable forestry practices, including illegal logging</li> </ul> <p>The ERPDP does also design features to prevent and minimize potential displacement per driver. The document presents a list of mitigating measures aiming to minimize any unplanned risk of displacement linked to the proposed ER Program measures.</p>	
<p><b>Ind 17.2</b> The ER Program has in place an effective strategy to mitigate and/or minimize, to the extent possible, potential Displacement, prioritizing key sources of Displacement risk.</p> <p>[ER Program design features to prevent and minimize potential Displacement 11.2]</p>	<b>YES</b>
<p>The ER Program does have in place a strategy to mitigate and/or minimize the potential displacement. The reasonability of the strategy makes believe that it will be effective in the short and medium term. The TAP finds that the plan is well presented and indicator is accomplished.</p>	

<b>Ind 17.3</b> By the time of verification, the ER Program has implemented its strategy to mitigate and/or minimize potential Displacement	<b>N.A</b>
Only applicable at the time of verification.	
<b>Ind 17.4</b> ER Programs are also invited to report on changes in major drivers in the ER Accounting Area, any Displacement risks associated with those drivers, and any lessons from the ER Programs' efforts to mitigate potential Displacement	<b>N.A</b>
Only applicable at the time of verification.	
<b>C 18</b> The ER Program is designed and implemented to prevent and minimize the risk of reversals and address the long-term sustainability of ERs	
<b>Ind 18.1</b> The ER Program has undertaken an assessment of the anthropogenic and natural risk of reversals that might affect ERs during the Term of the ERPA and has assessed, as feasible, the potential risk of reversals after the end of the Term of the ERPA  [Identification of risk of Reversals 12.1]	<b>YES</b>
<p>Mozambique's ER Program has identified natural and anthropogenic sources of reversals that might affect Emissions Reductions during the Term of the ERPA in section 11.1 "Identifying risks of reversion". In this same section the ER Program design features to prevent and mitigate reversals. This section aims to identify anthropogenic and natural risks of reversal that might affect ERs during the term of the ERPA and undermine its sustainability. Those risks of reversal can also be apprehended as potential ER Program implementation risks.</p> <p>The default risks factors in the ER Program Buffer Guidelines are used to describe the main risks factors of the ER Program:</p> <ul style="list-style-type: none"> <li>• A. Lack of broad and sustained stakeholder support. Although theoretically the ER Program provides a wide range of measures aiming at reducing this risk to almost zero, there are un-forecasted parameters that may still alter their efficiency, in the long run, including beyond the terms of the ERPA. Consequently, the overall risk assessment, even with the existence of a wide range of mitigation measures expected to be efficient, is medium.</li> <li>• B. Lack of institutional capacity and/or ineffective vertical/cross-sector coordination. Assessments of risk B is medium, on a precautionary note and in order to be realistic and acknowledge the still short experience of institutions in REDD+ coordination.</li> <li>• C. Lack of long-term effectiveness in confronting underlying factors. The risk is mitigated by a good range of measures that enable to limit major reversals in the future. However, implementation risks still exist and the wider context, including in terms of financial stability that makes it impossible to reduce this risk to zero. Risk C is therefore considered as medium.</li> <li>• D. Exposure and vulnerability to natural disturbances. Although the risk natural disturbance in the ER Program area is relevant, and despite the possible increase of drought events, the "mortality risk" for the Miombo forest composing the ER Program area during the terms of the ERPA is low: Miombo is already well adapted to fires and droughts and relevant mitigation measures are reducing this risk. However, the risk of occurrence of typhoons is too hard to predict and the emissions resulting from subsequent slash and burn agriculture cannot be fully mitigated. Risk C should therefore be considered as medium.</li> </ul>	

<p><b>Ind 18.2</b> The ER Program demonstrates how effective ER Program design and implementation will mitigate significant risks of Reversals identified in the assessment to the extent possible, and will address the sustainability of ERs, both during the Term of the ERPA, and beyond the Term of the ERPA [ER Program design features to prevent and mitigate Reversals 12.2]</p>	<p><b>YES</b></p>
<p>The ER Program demonstrates how effective ER Program design and implementation will mitigate significant risks of Reversals through different risk analyzed:</p> <ul style="list-style-type: none"> <li>• A. Lack of broad and sustained stakeholder support. Following is a list (not exhaustive) of mitigation measures presented in the ERPD: <ul style="list-style-type: none"> <li>○ Local population should be able to make use of a transparent, clear and well-known Feedback and Grievance Redress Mechanism (FGRM) all along the ER Program implementation process in order for their concerns and criticism to be taken into account in the design and implementation of the ER Program.</li> <li>○ Communication with stakeholders in a transparent and participatory way is also ensured in the ER Program through the creation of the Zambézia Multi-Stakeholders Landscape Forum (MSLF)</li> <li>○ With regard to illegal logging, the improvement of control, forest management and overall livelihood that the ER Program is expected to generate should reduce both the possibility and the appeal of illegal logging</li> </ul> </li> <li>• B. Lack of institutional capacity and/or ineffective vertical/cross-sector coordination. c <ul style="list-style-type: none"> <li>○ The institutional arrangements for the implementation of the ER Program are described in both the ER-PD and the REDD+ National Strategy. Political commitment and capacities for the implementation of the ER Program are ensured through the creation of the Landscape Management Unit (LMU) at national level, the provincial Landscape Coordination Unit (LCU) in Zambézia, the MITADER and the FNDS.</li> <li>○ various multi-stakeholders platforms, including the National Steering Committee, insure the on-going participation and cooperation of the various levels of the governments and of the various ministries involved in REDD+ and in the ER Program</li> <li>○ MozFip and the "Sustenta" project are significant supports for the ER Program</li> <li>○ At local level, implementation capacities have been strengthened with the creation of the Landscape Coordination Unit that have been reinforced with additional staff</li> </ul> </li> <li>• C. Lack of long-term effectiveness in confronting underlying factors. Mitigating measures are comprised in the wide range of interventions that the proposed ER Program offers. The ERPD presents a complete and extense argumentation of the risk factor, summarized in “implementation risks that may lead to reversals” and “political, economic and financial risk”.</li> <li>• D. Exposure and vulnerability to natural disturbances. Following is a list (not exhaustive) of mitigation measures presented in the ERPD: <ul style="list-style-type: none"> <li>○ relevant mitigation strategy will rely on training on conservation agriculture taking this situation into account so as to promote adequate models and crops</li> <li>○ Pest Management Plan has been designed with provisions for specific biological controls and the development and use of crop varieties that are resistant or tolerant to the pest</li> </ul> </li> </ul>	
<p><b>C 19</b> The ER Program accounts for Reversals from ERs that have been transferred to the Carbon Fund during the Term of the ERPA</p>	
<p><b>Ind 19.1</b> During the Term of the ERPA, the ER Program accounts for Reversals from ERs using one of the following options:</p> <ul style="list-style-type: none"> <li>▪ Option 1: The ER Program has in place a Reversal management mechanism (e.g., buffer reserve or insurance) that is substantially equivalent to the Reversal risk mitigation assurance provided by</li> </ul>	<p><b>YES</b></p>

<p>the 'ER Program CF Buffer' approach referred to in option 2 below, appropriate for the ER Program's assessed level of risk, which in the event of a Reversal during the Term of the ERPA will be used to fully cover such Reversals.</p> <ul style="list-style-type: none"> <li>Option 2: ERs from the ER Program are deposited in an ER Program-specific buffer, managed by the Carbon Fund (ER Program CF Buffer), and based on a Reversal risk assessment. ERs deposited in the ER Program CF Buffer (Buffer ERs) will not be transferred to the Carbon Fund. In the event that a Reversal event occurs during the Term of the ERPA, an amount of Buffer ERs will be cancelled from the ER Pro</li> </ul> <p>[Reversal management mechanism, Selection of Reversal management mechanism 12.3]</p>	
<p>During the Term of the ERPA, the ZILM ER Program accounts for reversals from Emissions Reductions using the second option: "ERs from the ER Program are deposited in an ER Program-specific buffer, managed by the Carbon Fund (ER Program CF Buffer), based on a Reversal risk assessment. ERs deposited in the ER Program CF Buffer (Buffer ERs) will not be transferred to the Carbon Fund. In the event that a Reversal event occurs during the Term of the ERPA, an amount of Buffer ERs will be cancelled from the ER Program CF Buffer equivalent to the amount of transferred ERs affected by the Reversal event."</p> <p>The mechanism will act as insurance: a proportion of the credits generated by the ER Program will contribute to the reversal buffer. This proportion should correspond to the estimated risk of reversals. Separate accounts will be created in the ER Transaction Registry – yet to be created - for the exclusive purpose of receiving, disbursing, or canceling ERs that will be allocated to the reversal buffer and the pooled reversal buffer.</p>	
<p><b>C 20 The ER Program, building on its arrangements put in place during the readiness phase and during the Term of the ERPA, will have in place a robust Reversal management mechanism to address the risk of Reversals after the Term of the ERPA</b></p>	
<p><b>Ind 20.1</b> At the latest 1 year before the end of the Term of the ERPA, the ER Program will have in place a robust Reversal management mechanism or another specified approach that addresses the risk of Reversals beyond the Term of the ERPA</p>	<p><b>N.A</b></p>
<p>Only applicable before the end of the ERPA term.</p>	
<p><b>Ind 20.2</b> If the ER Program has selected option 2 under Indicator 19.1, all or a portion of the Buffer ERs of the ER Program, subject to a Carbon Fund review of the Methodological Framework and a decision of the parties to the ERPA in 2019, will be transferred to the mechanism identified in Indicator 20.1 at the end of the Term of the ERPA. If the ER Program fails to meet the requirements of Indicator 20.1, all remaining Buffer ERs in the ER Program CF Buffer will be cancelled</p>	<p><b>N.A</b></p>
<p>Only applicable before the end of the ERPA term.</p>	
<p><b>C 21 The ER Program monitors and reports major emissions that could lead to reversals of ERs transferred to the Carbon Fund during the Term of the ERPA</b></p>	
<p><b>Ind 21.1</b> The ER Program Monitoring Plan and Monitoring system are technically capable of identifying Reversals</p> <p>[Monitoring and reporting of major emissions that could lead to Reversals of ERs 12.4]</p>	<p><b>YES</b></p>



<p>Although at the time of the assessment it is not possible to confirm if it can identify reversals, the TAP confirm that based on the design, the possible reversals can be identified.</p> <p>Mozambique's ER Program has identified natural and anthropogenic sources of reversals that might affect Emissions Reductions during the Term of the ERPA in section 11.1 "Identifying risks of reversion". In this same section the ER Program design features to prevent and mitigate reversals.</p> <p>The default risks factors in the ER Program Buffer Guidelines are used to describe the main risks factors of the ER Program: "A. Lack of broad and sustained stakeholder support", "B. Lack of institutional capacity and/or ineffective vertical/cross-sector coordination", "C. Lack of long-term effectiveness in confronting underlying factors and "D. Exposure and vulnerability to natural disturbances".</p> <p>In order to prevent and minimize the risk factors of reversals mentioned above, the ER Program proposes a set of mitigation measures under each risk factor.</p>	
<p><b>Ind 21.2.</b> The ER Program reports to the Carbon Fund within 90 calendar days after becoming aware of any emissions in the Accounting Area or changes in ER Program circumstances that, in the reasonable opinion of the ER Program, could lead to Reversals of previously transferred ERs by the next Monitoring event. The ER Program explains how the potential Reversals would be addressed by additional ER Program Measures or by the Reversal management mechanism described in Indicator 19.1.</p>	<p><b>N.A</b></p>
<p><b>C 22 Net ERs are calculated by the following steps:</b></p> <ol style="list-style-type: none"> <li><b>1. Subtract the reported and verified emissions and removals from the Reference Level</b></li> <li><b>2. Set aside a number of ERs from the result of step 1, above, in a buffer reserve. This amount reflects the level of uncertainty associated with the estimation of ERs during the Term of the ERPA. The amount set aside in the buffer reserve is determined using the conservativeness factors for deforestation listed in the MF. For estimated emissions reductions associated with degradation, the same conservativeness factors may be applied if spatially explicit activity data (IPCC Approach 3) and high-quality emission factors (IPCC Tier 2) are used. Otherwise, for proxy-based approaches, apply a general conservativeness factor of 15% for forest degradation Emission Reductions.</b></li> <li><b>3. Set aside a number of ERs in the ER Program CF Buffer or other reversal management mechanism created or used by an ER Program to address Reversals</b></li> </ol>	
<p>[Ex-ante estimation of the Emission Reductions 14.3]</p>	<p><b>YES</b></p>
<p>Despite the Emissions Reductions will not really occur until the ER Program is implemented, monitored, verified and reported, the net Emissions Reductions are calculated as an ex-ante forecast of the program. The estimations are calculated as a % of reference level emissions of deforestation activity.</p> <p>In section 13. "Emissions Reductions Calculation", Mozambique presents the reduction objectives over the term of the ERPA. ZILMP has the following objectives: reduction of 15% of emissions below the reference level over the period 2018-2021, and reduction of 20% of emissions below the reference level over the period 2022-2025. The increase in ambition over the second period is explained by the belief that the efficiency of the ER Program is expected to increase because enabling and operational activities would have been developed for a few years.</p> <p>The origin of this percentage reduction in emissions is not well explained and the TAP suggests clarifying these.</p>	

To calculate the net ex-ante Emissions Reductions, the procedures presented in the Carbon Fund Methodological Framework was followed. In table 64 the ERPD it is presented the Reference level (2018-2025) with the expected emissions reductions under the ER Program (15% and 20%). The estimated total uncertainty for the subnational FREL/FRL of Mozambique is 15% and is used as a proxy for the net ER estimation. A discount of 4% was therefore applied, in accordance with the methodological framework of the Carbon Fund. 26% was subtracted towards the Buffer, in accordance with the risks identified.

The total net ER for the period 2018-2025 is 10,016,147 tons of CO<sub>2</sub>-eq., according to the table presented below.

ERPA term year t	Reference level (tCO <sub>2</sub> e/yr)	Estimation of expected emissions under the ER Program (tCO <sub>2</sub> e/yr)	Estimation of expected set-aside to reflect the level of uncertainties associated with the estimation of ERs during the Term of the ERPA (tCO <sub>2</sub> e/yr)	Estimation of expected set-aside to reflect the level of possible reversals associated with the estimation of ERs during the Term of the ERPA (tCO <sub>2</sub> e/yr)	Estimated Emission Reductions (tCO <sub>2</sub> e/yr)
2018	10,220,558	1,533,084	61,323	398,602	1,073,159
2019	10,220,558	1,533,084	61,323	398,602	1,073,159
2020	10,220,558	1,533,084	61,323	398,602	1,073,159
2021	10,220,558	1,533,084	61,323	398,602	1,073,159
2022	10,220,558	2,044,112	81,764	531,469	1,430,878
2023	10,220,558	2,044,112	81,764	531,469	1,430,878
2024	10,220,558	2,044,112	81,764	531,469	1,430,878
2025	10,220,558	2,044,112	81,764	531,469	1,430,878
<b>TOTAL</b>	<b>112,426,138</b>	<b>14,308,781</b>	<b>572,351</b>	<b>3,720,283</b>	<b>10,016,147</b>

**C 23 To prevent double-counting, ERs generated under the ER Program shall not be counted or compensated for more than once. Any reported and verified ERs generated under the ER Program and sold and/or transferred to the Carbon Fund shall not be sold, offered or otherwise used or reported a second time by the ER Program Entity. Any reported and verified ERs generated under the ER Program that have been sold and/or transferred, offered or otherwise used or reported once by the ER Program Entity shall not be sold and transferred to the Carbon Fund**

(i) [Participation under other GHG initiatives 18.1]

**NO**

Even the Country states clearly that intends to implement the correspondent mechanisms to avoid double counting, on the ERPD Program Area there are two pre-existing Avoided Deforestation Projects still ongoing:

- 1) REDD+ Pilot project to mitigate deforestation and forest degradation in the GNR and its surrounding (2014 - 2017) - FFEM project :... The ER Program accounting area includes the Gilé National Reserve (GNR) – see section 3 for the map of the accounting area. Since 2014, the GNR and its surroundings are part of the Gilé REDD+ Pilot project to mitigate deforestation and forest degradation.
- 2) Improved cook stoves for rural families in Gile Reserve Zambezia (2016 - 2020) - CarbonSink project

Important in this context to add that the country intends to terminate the VCS Projects in order that they don't issue and generate more credits. Nevertheless, that depends on a specific number of actions and a sort of legal implications that need to be addressed/proved before the effectively and legal termination of the projects. We recommend that the host country and the stakeholders involved in the project execute the contractual arrangements to terminate effectively the project.

Other Voluntary Projects CCB, Plan Vivo and VCS registered in Markit (even they are situated outside of the Program Area) are being executed and producing emissions reductions as listed on Tables 79 an 80 – See Section 18.2 :

Table 79: Carbon projects in Mozambique in the Markit Registry (FNDS, 2017f)

<b>GS1247 Improved Kitchen Regimes Multi-Country PoA Master Project VPA 23 Improved Kitchen Regimes: Improved Cook Stoves in Chamanculo C</b>						
103000000000028	co2balan ce UK Ltd.	Maputo (Mozambique)	Energy Efficiency – Domestic	Gold Standard	Issued	Validator: Internal Validation/Verification. Project Size: Micro-scale Project Registration Type: Normal Average Annual Volume of Credits: 10000 Project Stream: VER Fee structure: SOP Crediting Period: 7 Years Renewable
<b>GS1247 VPA 52: Improved Cook Stoves in Chamanculo C, Maputo (Mozambique) phase II</b>						
1030000000010320	co2balan ce UK Ltd.	Maputo (Mozambique)	Energy Efficiency – Domestic	Gold Standard	Issued	Ide
<b>GS1247 VPA 53: Improved Cook Stoves in Chamanculo C, Maputo (Mozambique), phase III</b>						
1030000000010321	co2balan ce UK Ltd.	Maputo (Mozambique)	Energy Efficiency – Domestic	Gold Standard	Issued	Ide
<b>Sofala Community Carbon Project (formerly the N'hambita Community Carbon Project)</b>						
1000000000000169	Envirotra de Carbon Limited	Sofala (Mozambique)	Forest	Plan Vivo	Active	Validator: Rainforest Alliance

Table 80: Carbon projects in Mozambique registered in the VCS project database

CCB1638	Sofala Community Carbon Project	Envirotrade	Mozambique	ARR	Second Edition	Climate Gold, Community Gold, Biodiversity Gold	Validation expired
CCB1617	Niassa Forest Project	GREEN RESOURCES	Mozambique	ARR	Second Edition		Validation approved

Even the ER Program host country express clearly on Section 18.1 that intends to prevent double-counting and that the two projects will be finished /terminated in 2017 before the starting of the ERPA ERs in a way that the ERs generated under the ER Program shall not be counted or compensated for more than once, at the date of this TAP Assessment there are not yet neither the Guidance, neither the Database Platform, neither the ERs Transaction Registry that allows the TAP to consider the criteria accomplished in accordance to the MT.

The TAP recommends that the Host Country develop a Database REDD+ Information Platform and a ERs Transaction Registry that covers (if possible) the all country (attending that is clear that Mozambique is already attracting a significant number of emission reduction projects). In any case is important that the information and non double counting mechanisms cover the ER Program Area.

Even the ER Program Host Country states that intends to create/implement the information systems and the non-double counting mechanisms before the ERPA starting, at the date of this TAP Assessment Report there are not yet neither the Initial Drafted Rules, the Guidance, neither the Database Platform or even the ERs Transaction Registry that could allow the TAP to consider the criteria accomplished in accordance to the MT.

The TAP recommends that the Host Country develop a Database REDD+ Information Platform and a ERs Transaction Registry that covers (if possible) all the country all country (attending that is clear that Mozambique is already attracting a significant number of emission reduction projects). In any case is important that the information and non-double counting mechanisms cover the ER Program Area.

On Section 18.2 the country states on the ER PD Program at Box 11 that intends to take the decisions related to the National REDD+ Program and Project Data Management System in a short period of time:

#### Box 1: Next steps for the REDD+ Program and Project Data Management System

The next step in the implementation of the national REDD+ Program and Project Data Management System in Mozambique is the approval of its administrative procedures. This should be stated in the new REDD+ Decree, which is currently being developed, and which is expected to happen before the submission of the final ER-PD draft to the FCPF CF. It should also be decided which institutions will be responsible for hosting the system. For now, the entity responsible for the coordination of the national REDD+ Program and Project Data Management System is DINAF, with support from the UT REDD+.

Also on Section 18.2 the country states on the ER PD Program at Box 11 that intends to take the decisions related to the ERs Transaction Registry in a short period of time:

#### Box 2: Next steps for the ER Transactions registry

The next steps for the implementation of the ER Transactions registry implies for the GoM to make a final decision on whether to maintain its own comprehensive national ER Transaction Registry or to use a centralized ER Transaction Registry managed by a third party on its behalf. It should also be decided where to host the registry and the final institutional arrangements linked to its management, through a well-defined operational guide. For now, discussions within the REDD+ Decree Review Committee are in favor of:

- The ER Transactions Registry being managed by the MEF in collaboration with the FNDS;
- Potential byers having the obligation to register with the MEF prior to transactions;
- The GoM having its own comprehensive national ER Transaction Registry.

*Those elements are still being discussed and will be definitely decided by the ER-PD final draft submission.*

The criteria is not met .

## C 24 The ER Program meets the World Bank social and environmental safeguards and promotes and supports the safeguards included in UNFCCC guidance related to REDD+

**Ind 24.1** The ER Program demonstrates through its design and implementation how it meets relevant World Bank social and environmental safeguards, and promotes and supports the safeguards included in UNFCCC guidance related to REDD+, by paying particular attention to Decision 1/CP.16 and its Appendix I as adopted by the UNFCCC

**YES**

[ Description of how the ER Program meets the World Bank social and environmental safeguards and promotes and supports the safeguards included in UNFCCC guidance related to REDD+ 14.1]

Yes, the ER Program demonstrates through its design and implementation that meets the relevant World Bank social and environmental safeguards, and promotes and supports the safeguards included in UNFCCC guidance related to REDD+. The ER Program describes in a detailed way the legal context of the Environmental Safeguards in Section 14.1 and 14.2. The Country shows that is accordance with the compliance of the MF, stating :

- 1 ) The adherence to and the adoption of a series of international and regional environmental protection and conservation conventions and protocols, which were described in section 4 and Table 26 (Mozambique signed the UNFCCC on 3 November 1992, and ratified the Kyoto Protocol on 18 January 2005, and entered the protocol into force on 18 April 2005. Also Mozambique is one of the 196 countries that signed and ratified the agreement to reduce greenhouse gas emissions to contain global warming to 2°C. Finally in this context the ER Program attends to Decision 1/CP.16 and its Appendix I as adopted by the UNFCCC).
- 2) The approval of a significant set of legislation with direct and indirect implications to environmental protection, which were detailed in section 4 and in Table 25 (special reference is made to the Environmental Impacts Assessment (EIA) Regulation, approved by Decree 54/2015 (that regulates the safeguards procedures);
- 3) The creation of specific public institutions or strengthening of existing institutions dedicated to both environmental and social management.

To a more detailed approach see the tables 66 and 67 below:

**Table 2: Compliance with UNFCCC guidance related to REDD+ (Cancun, 2010)**

<b>Safeguards for policy approach and positive incentives on issues relating to REDD+ - Appendix I of the Decision 1/CP.16 adopted by the UNFCCC</b>	<b>Compliance of the ER Program</b>
Actions complement or are consistent with the objectives of national forest programs and relevant international conventions and agreements	<b>Yes</b> <i>See sections 2.2 &amp; 4.3 &amp; 4.5</i> <i>See SESA and ESMF</i>
Transparent and effective national forest governance structures, taking into account national legislation and sovereignty	<b>Yes</b> <i>See sections 2.2 &amp; 2.3 &amp; 4.5 &amp; 6 &amp; 9</i> <i>See SESA and ESMF</i>
Respect for the knowledge and rights of indigenous peoples and members of local communities	<b>Yes</b> <i>See sections 4.4 and 5</i> <i>See SESA, ESMF and PF</i>
Full and effective participation of relevant stakeholders, in particular indigenous peoples and local communities	<b>Yes</b> <i>See sections 5 &amp; 6</i> <i>See SESA and ESMF</i>
Actions are consistent with the conservation of natural forests and biological diversity, ensuring that the actions (...) are not used for the conversion of natural forests, but are instead used to incentivize the protection and conservation of natural forests and their ecosystem services, and to enhance other social and environmental benefits	<b>Yes</b> <i>See section 4.3 &amp; 16</i> <i>See SESA, ESMF and PF</i>
Actions to address the risks of reversals	<b>Yes</b> <i>See section 11</i> <i>See SESA, ESMF and PF</i>
Actions to reduce displacement of emissions	<b>Yes</b>

Social and environmental issues and risk mitigation measures

According to the ESMF, seven of the 10+2 World Bank Operational Safeguards Policies are expected to be triggered during REDD+ and the ER Program implementation - see Table 3.

Table 3: World Bank safeguard policies triggered by ER Program

World Bank Operational Safeguards Policies	Triggered by ER Program
Environmental Assessment (OP/BP 4.01)	X
Pest Management (OP 4.09)	X
Involuntary Resettlement (OP/BP 4.12)	X
Natural Habitats (OP/BP 4.04)	X
Forests (OP/BP 4.36)	X
Physical Cultural Resources (OP/BP 4.11)	X
Indigenous Peoples (OP/BP 4.10)	-
Safety of Dams (OP/BP 4.37) <sup>1</sup> - <i>preemptively</i>	X
Projects on International Waterways (OP/BP 7.50)	-
Projects in Disputed Areas (OP/BP 7.60)	-

The criteria is met.

**Ind 24.2** Safeguards Plans address social and environmental issues and include related risk mitigation measures identified during the national readiness process, e.g., in the SESA process and the ESMF, that are relevant for the specific ER Program context (e.g., land tenure issues), taking into account relevant existing institutional and regulatory frameworks. The Safeguards Plans are prepared concurrently with the ER Program Document, and are publicly disclosed in a manner and language appropriate for the affected stakeholders

[Description of how the ER Program meets the World Bank social and environmental safeguards and promotes and supports the safeguards included in UNFCCC guidance related to REDD+ 14.1]

YES

The ER Program address on the Safeguards Plan the social and environmental issues and include related risk mitigation measures identified during the national readiness process, in the SESA process and the ESMF, that are relevant for the specific ER Program context (e.g., land tenure issues), taking into account relevant existing institutional and regulatory frameworks, as mentioned above in 24.1 in TAP comments (See Tables 66 and 67 on Section 14 of the ERPD).

Also the Safeguards Plans have prepared concurrently with the ER Program Document, and are publicly disclosed in a manner and language appropriate for the affected stakeholders.

The criteria is met.

**C 25 Information is provided on how the ER Program meets the World Bank social and environmental safeguards and addresses and respects the safeguards included in UNFCCC guidance related to REDD+, during ER Program implementation**

**Ind 25.1** Appropriate monitoring arrangements for safeguards referred to in Criterion 24 are included in the Safeguards Plans

YES

<sup>1</sup> Despite the project's association with agricultural and forestry development, no major water related infrastructure is expected, nevertheless the OP/BM 4.37 on Safety of Dams is triggered mainly as a precautionary measure.



[Description of arrangements to provide information on safeguards during ER Program implementation 15.2 and 6.1]	
Yes, on The ER PD Program are described appropriate monitoring arrangements for the safeguards referred to in Criterion 24. See TAP Comments on 24.1 and 24.2. The criteria is met.	
<b>Ind 25.2</b> During ER Program implementation, information on the implementation of Safeguards Plans is included in an annex to each ER monitoring report and interim progress report. This information is publicly disclosed, and the ER Program is encouraged to make this information available to relevant stakeholders. This information is also made available as an input to the national systems for providing information on how safeguards are addressed and respected (SIS) required by the UNFCCC guidance related to REDD+, as appropriate.	<b>N.A</b>
Only applicable at the time of verification.	
<b>C 26 An appropriate Feedback and Grievance Redress Mechanism (FGRM) developed during the Readiness phase or otherwise exist(s), building on existing institutions, regulatory frameworks, mechanisms and capacity</b>	
<b>Ind 26.1</b> An assessment of existing FGRM, including any applicable customary FGRMs, is conducted and is made public. The FGRM applicable to the ER Program demonstrates the following: i) Legitimacy, accessibility, predictability, fairness, rights compatibility, transparency, and capability to address a range of grievances, including those related to benefit-sharing arrangements for the ER Program; ii) Access to adequate expertise and resources for the operation of the FGRM [Description of the Feedback and Grievance Redress Mechanism (FGRM) in place and possible actions to improve it 15.3]	<b>YES</b>
There is currently still no approved official FGRM system. However the major aspects of the proposed mechanisms such as : i) legitimacy, accessibility, predictability, fairness, rights compatibility, transparency, and capability to address a range of grievances, including those related to benefit-sharing arrangements for the ER Program, and ii) Access to adequate expertise and resources for the operation of the FGRM; are presented in a logical manner and would appear to provide the level of service necessary. The criteria is met.	
<b>Ind 26.2</b> The description of FGRM procedures, included in the Benefit-Sharing Plan and/or relevant Safeguards Plans, specifies the process to be followed to receive, screen, address, monitor, and report feedback on, grievances or concerns submitted by affected stakeholders. As relevant, the Benefit-Sharing Plan and/or relevant Safeguards Plans and/or ER Program Document describe the relationship among FGRM(s) at the local, ER Program, and national levels [Description of the Feedback and Grievance Redress Mechanism (FGRM) in place and possible actions to improve it 15.3]	<b>YES</b>
The ER Program Document describes the relationship among FGRM(s) at the local, ER Program, and national levels. While some aspects for the specific process to be followed are not yet clear in the ERPD (selection of an independent mediator, either at the local level 1 (NGO?) or at Independent Level, most of the process is described adequately.	

The criteria is met.	
<p><b>Ind 26.3</b> If found necessary in the assessment mentioned in Indicator 26.1, a plan is developed to improve the FGRM</p> <p>[Description of the Feedback and Grievance Redress Mechanism (FGRM) in place and possible actions to improve it 15.3]</p>	YES
<p>The complete PRMV system for REDD+ and the ER Program, including the SIS and FGRM, will be tested as a pilot in 2018, in 15 districts of the provinces of Zambézia and Cabo Delgado. The FGMR has been designed to work on the REDD+ MRV web platform.</p> <p>The criteria is met.</p>	
<b>C 27 The ER Program describes how the ER Program addresses key drivers of deforestation and degradation</b>	
<p><b>Ind 27.1</b> The ER Program identifies the key drivers of deforestation and degradation, and potentially opportunities for forest enhancement</p> <p>[Analysis of drivers and underlying causes of deforestation and forest degradation, and existing activities that can lead to conservation or enhancement of forest carbon stocks 4.1]</p>	YES
<p>The ER Program identifies the key drivers and the underlying causes of deforestation in section 4.1 of the ERPD. The analysis is exhaustive and coherent with reality, as it could be interpreted during the TAP site visit from April 10<sup>th</sup> to 13<sup>th</sup>. The key drivers of deforestation are:</p> <ul style="list-style-type: none"> <li>• Small scale agriculture: subsistence agriculture, with most of the production being consumed within the household</li> <li>• Charcoal production: in the ER Program area, it seems that charcoal production is already accounted for in the deforestation process linked to small-scale agriculture. Indeed, charcoal production is associated with slash and burn agriculture: the majority of it is derived from trees that are selected on areas that will be deforested for the settlement of agricultural fields the same year or the year after.</li> <li>• Forestry, interpreted as illegal logging, focused on specific rare and precious timber; (ii) a too rapid expansion of areas granted under simple licensing exploitation, with subsequent fast exploitation of available timber</li> </ul> <p>The program does also studies other potential drivers of deforestation, but no other factor has been identified as significant enough to be considered as a driver of deforestation in the ER Program area. Indirect drivers are also studied.</p> <p>The document does also considers the existing policies that can lead to conservation or the enhancement of carbon stocks: different programs in the agriculture sector, the national Program for Sustainable Development and the Projecto Floresta em Pé, MOZFIP - Mozambique Forest Investment Project, MOZDGM - The Dedicated Grand Mechanism in Mozambique, "Sustenta" project - Agriculture and Natural Resources Landscape Management project and MOZBIO - Conservation Area for Biodiversity and Development Project.</p> <p>The national PMRV for Mozambique will measure, report and verify the selected activities: deforestation, forest degradation and enhancement of carbon stocks (A/F) through the implementation of a Continuous Forest Inventory (National Forest Inventory and National Net of Permanent Plots) combined with Forest area change mapping. At national level, for the development of national forest reference level (FRL), degradation and enhancement of carbon stocks will</p>	

be analyzed with the results from NFMS available in 2018. If the national analysis proves these sources and sinks are significant, the possibility of their integration will be reassessed during the monitoring periods.	
<p><b>Ind 27.2</b> The ER Program identifies currently planned ER Program Measures and how they address the key drivers identified in Indicator 27.1, and the entities that would undertake them</p> <p>[Description and justification of the planned actions and interventions under the ER Program that will lead to emission reductions and/or removals 4.3]</p> <p>[Institutional and implementation arrangements 6.1]</p>	YES
<p>Yes, the ER Program identifies currently the planned ER Program Measures and describes in detail how they address the key drivers:</p> <p>The ER Program enunciates the main drivers of deforestation (direct and indirect) and adds details on how the drivers of deforestation will be addressed in the quest to reduce its impact:</p> <p>Direct Drivers:</p> <ol style="list-style-type: none"> <li>1) small-scale agriculture ("slash and burn") practices, especially for the production of maize and cassava</li> <li>2) charcoal production;</li> <li>3) illegal logging</li> <li>4) Large-scale agriculture (potentially);</li> </ol> <p>The ER Program identifies the different types of strategic activities that include direct mitigation measures and facilitation measures associated with the main drivers for deforestation.</p> <p>Complementary measures, especially those based in other Programs and Projects already ongoing or to be initiated together with the ER Program are considered extremely important to address the main drivers of deforestation:</p> <ol style="list-style-type: none"> <li>1) National program on the Agricultural sector;</li> <li>2) The national Program for Sustainable Development and the Projecto Floresta em Pé</li> <li>3) The International Program : MOZFIP - Mozambique Forest Investment Project - USD 24 million</li> <li>4) The International Program : MOZDGM - The Dedicated Grand Mechanism in Mozambique - USD 4.5 million</li> <li>5) The International program : "Sustenta" project - Agriculture and Natural Resources Landscape Management project (2016 – 2021) - USD 40 million;</li> <li>6) The International Program : MOZBIO - Conservation Area for Biodiversity and Development Project (2016 – 2018) - USD 46.32 million</li> </ol> <p>A detailed list of the Barriers for REDD and how to address them in cross sectorial approach are highlighted on Figure 11: Cross-cutting interventions and topics to be covered in the ER Program on Section 4.3.</p> <p>Also the ER Program identifies the entities that would undertake the correspondent actions. Especially attention to the creation of MITADER that creates a cross sectorial approach on the country policies and the future implementation of the actions to avoid the negative effects of the deforestation. ..." MITADER brings together responsibilities that were previously spread across several ministries, in order to facilitate the coordination needed to address challenges of cross-sectorial nature: the MITADER's coordination role is expected to be improved in a situation where it has direct management mandate over a wider number of important natural resources and social issues and particularly to manage rural development and forests. The creation of MITADER is therefore a turning point, showing the efforts that the GoM has been carrying out to integrate complex issues and promote synergy between core challenges for REDD+ policies. This restructuring is a clear indication of the Government's vision and commitment to promote a landscape-based approach to forest and natural resources management..."</p>	

On that context is important to acknowledge also the National Fund for Sustainable Development (FNDS) that will play a fundamental role on the ER Program. The Fund was created by governmental decree in February 2016 (Decree n°6/2016). It is an independent body with administrative and financial autonomy, under the sectorial tutelage of the Ministry of Land, Environment and Rural Development (MITADER – which signed the Letter of Intent (LOI) with the Carbon Fund in December 2015) and the financial tutelage of the Ministry of Economy and Finance. It aims to promote and manage the financing of programs and projects contributing to a sustainable and inclusive development in Mozambique, with special attention to rural development. One of its core responsibilities is to channel domestic and international funding to the relevant beneficiaries including, in the context of the ER Program, the ER Payments. The FNDS will supervise the good implementation of the ER Program and its overall coordination at central level.

Taking in consideration the detailed information and exhaustively description of the ER Program on section 4.3 the TAP considers that the criteria is met.

**C 28 The ER Program has undertaken and made publicly available an assessment of the land and resource tenure regimes present in the Accounting Area**

**Ind 28.1** The ER Program reviews the assessment of land and resource tenure regimes carried out during the readiness phase at the national level (i.e., SESA) and, if necessary, supplements this assessment by undertaking an additional assessment of any issues related to land and resource tenure regimes in the Accounting Area that are critical to the successful implementation of the ER Program, including:

**YES**

- I. The range of land and resource tenure rights (including legal and customary rights of use, access, management, ownership, exclusion, etc.) and categories of rights-holders present in the Accounting Area (including Indigenous Peoples and other relevant communities);
- II. The legal status of such rights, and any significant ambiguities or gaps in the applicable legal framework, including as pertains to the rights under customary law;
- III. Areas within the Accounting Area that are subject to significant conflicts or disputes related to contested or competing claims or rights, and if critical to the successful implementation of the ER Program, how such conflicts or disputes have been or are proposed to be addressed; and
- IV. Any potential impacts of the ER Program on existing land and resource tenure in the Accounting Area.

The ER Program demonstrates that the additional assessment has been conducted in a consultative, transparent and participatory manner, reflecting inputs from relevant stakeholders

[Description of land tenure systems, analysis of laws and regulatory framework 4.4 and 4.5, stakeholder consultation process 5.1]

Yes, the ER Program reviews the assessment of land and resource tenure regimes carried out during the readiness phase at the national level and supplements this assessment by undertaking an additional assessment of any issues related to land and resource tenure regimes in the Accounting Area that are critical to the successful implementation of the ER Program.

The ER Program analysis the full range spectrum of land and resource tenure rights, including legal and customary rights of use, access, management, ownership, exclusion and categories of rights-holders present in the Accounting Area defining them as:

- 1) State Public Forests and Public Land Ownership Principle;
- 2) Communities Rights (DUATs);
- 3) Individuals (DUAFs) and
- 4) Private Investors (DUATs).

Important to consider in this context the recent 2004 Constitution of the Republic of Mozambique (CRM), stating that "... land is the property of the State and cannot be bought and sold, mortgaged or otherwise alienated.

Nevertheless, the same “Magna Carta” recognizes in its Article 110 the land use and benefit rights mechanism, the (DUAT) to all who want to use land, “taking into account their social or economic purpose”. Important in this context also is Article 111 of the CRM states that already acquired rights must be considered when new rights are being allocated - to investors. The existence of those main legal mechanisms: DUAFs and DUATs assure to the community’s individuals and private investors the rights to explore the natural resources of the land (forest and non-forest products). Interesting to notice that the Mozambique legislation already allows the existence of a partnership model between private investors and communities (allowing communities to participate on the revenues of the private investments/concessions). Besides and previous to those recent legal provisions inserted on the Magna Carta the country as enacted in 1995 a New National Land Policy (NLP) and in 1997 a new Land Law, that gave full recognition to rights acquired through these customary systems.

The ER Program also analyses the different type of right-holders on the ER Program area (especially if there are or not Indigenous People and conclude that: ...” Officially, there are no indigenous peoples in Mozambique using the official guidelines provided by the UN Permanent Forum on Indigenous Issues (United Nations).” On Table 22 inserted on Section 4.4 Assessment of land and resource tenure in the Accounting Area, the ER Program explains that the nine districts composing the Accounting Area of the ER Program, have a total of 102 Local Communities that have been delimited up to November 2016, covering a total area of 3,254,663 hectares.

**Table 4: number of delimited local communities in the ER Program area**

<b>ZILMP Districts</b>	<b>Communities Delimited Up to November 2016 [1]</b>	<b>Area in hectares</b>
Alto-Molocué	27	259,847
Gilé	4	666,773
Ilé [2]	6	38,909
Maganja da Costa [2]	13	135,185
Pebane	11	837,500
Mocuba	14	1,169,198
Gurue	27	147,251
<b>TOTAL</b>	<b>102</b>	<b>3,254,663</b>

[1] Official data show that all of these communities have completed processes with Certificates of Delimitation issued

[2] Ilé includes Mulevala, Maganja da Costa includes Mocubela; these two new districts were created from Administrative Posts upgraded in 2013; official land data does not yet reflect this change

Source: MITADER/DNAT

The ER Program also address the legal status of such rights, and any significant ambiguities or gaps in the applicable legal framework, including as pertains to the rights under customary law, and potential conflicts or disputes related to contested or competing claims or rights, identifying clearly (as stated above) the legal framework applicable and by stating that the potential land tenure regularization is already being addressed by the land component of the "Sustenta" and of the MozFip projects, which are both part of the ER Program as stated in Section 4.1.

Taking in account the detailed description and analysis of the requisites established by the MF the TAP considers that the criteria is met.

<p><b>Ind 28.2</b> The ER Program explains how the relevant issues identified in the above assessment have been or will be taken into consideration in the design and implementation of the ER Program, and in the relevant Safeguards Plan(s). If the ER Program involves activities that are contingent on establishing legally recognized rights to lands and territories that Indigenous Peoples have traditionally owned or customarily used or occupied, the relevant Safeguards Plan sets forth an action plan for the legal recognition of such ownership, occupation, or usage. Beyond what is required for the successful implementation of the ER Program, the ER Program is encouraged to show how it can contribute to progress towards clarifying land and resource tenure in the Accounting Area, where relevant.</p> <p>[Assessment of land and resource tenure in the Accounting Area 4.4]</p> <p>[Description and justification of the planned actions and interventions under the ER Program that will lead to emission reductions and/or removals 4.3]</p>	<p><b>YES</b></p>
<p>The ER Program explains how the relevant issues identified have been or will be taken into consideration in the design and implementation of the ER Program, and in the relevant Safeguards Plan(s) and also how the activities that are contingent on establishing legally recognized rights to lands and territories that traditionally owned or customarily used or occupied</p> <p>Beyond what is required for the successful implementation of the ER Program, the ER Program is also determined to contribute to progress towards clarifying land and resource tenure in the Accounting Area with ER Program actions and also implementing complementary measures such as those defined on the "Sustenta" and of the MozFip projects, which are both part of the ER Program as stated in Section 4.1.</p> <p>Finally there is a full, detailed description and justification of the planned actions and interventions under the ER Program that will lead to emission reductions and/or removals.</p> <p>Taking this in consideration the TAP considers that the criteria is met.</p>	
<p><b>Ind 28.3</b> The ER Program provides a description of the implications of the land and resource regime assessment for the ER Program Entity's ability to transfer Title to ERs to the Carbon Fund</p> <p>[Transfer of Title to ERs 18.2]</p>	<p><b>YES</b></p>
<p>The ER Program describes in an exhaustive and detail way the implications of the land and resource regime assessment for the ER Program Entity's ability to transfer Title to ERs to the Carbon Fund, and specifically address the legal nature of the rights connected to the land ownership on Carbon Rights, enunciating the State (Public Land Ownership Principle) the Communities Rights (DUATs), the individuals rights (DUATs) and the private stakeholders/investors (DUAFs).</p> <p>Important to referee in this context the most recent 2004 Constitution of the Republic of Mozambique (CRM), stating that "...land is the property of the State and cannot be bought and sold, mortgaged or otherwise alienated. Also, the same "Magna Carta" of the Country recognizes in its Article 110 the land use and benefit rights mechanism, the (DUAT) to all who want to use land, "taking into account their social or economic purpose". Important in this context also is Article 111 of the CRM states that already acquired rights must be considered when new rights are being allocated - to investors for example. The existence of those main legal mechanisms: DUAFs and DUATs assure to the community's individuals and private investors the rights to explore the natural resources of the land (forest and non-forest products). Besides and previous to those recent legal provisions inserted on the Magna Carta the country as enacted in 1995 a New National Land Policy (NLP) and in 1997 a new Land Law, that gave full recognition to rights acquired through these customary systems.</p> <p>With the same degree of relevance is important to note that the ER Program acknowledges that are missing important regulatory procedures to be enacted by the Host Country to establishes the full competence and the ability of the ER Program Entity to transfer directly the ER Titles to the Carbon Fund:</p>	



..." The analysis ... shows that the State can transfer titles over ERs treated as products of a process of "use and development" of forest resources, either by the State itself through a REDD+ or ER project, or by other actors who agree that the State retains its property rights over any ERs that are produced by non-ER activities.

However, later discussions also indicate that the State may not have an automatic right to freely transfer ER titles in every part of the ER Program area. There are many other rights over the resources in question that must be taken into account, including though the concepts of DUAT, DUAF and community public domain. For now, the way in which the State, through its authorized GoM agency, handles the sale and transfer of ER titles is therefore determined by the territorial category of the area where the forest resources in question are located. In addition, the sector that will negotiate and sign international agreements for the transfer of ER titles in the name of the State still has to be clearly designated by law. Appropriate legislation, and absolute confidence in the rule of law and in the transparency of the registry systems that are established (see section 18), are both critical requirements for Mozambique being able to guarantee the legitimacy of the ER titles which it aims to transfer to the Carbon Fund.

To this aim, as previously stated, a revision of the REDD+ Decree is currently conducted. This revision will help establish the uncontested ability of the ER Program entity to transfer titles to ERs to the Carbon Fund in full understanding and consideration of local community's rights and in full compliance of the methodological requirement of the FCFP. Box 10 summarizes the main elements that are currently considered as necessary and which will be included in the new REDD+ Decree, which is expected to be approved before the submission of the final ER-PD draft. This ER-PD section will be updated accordingly.

Finally, the country is actively revising its most important regulatory framework on REDD+ (The Decree 70/2013 – That establishes the procedures for approval of REDD+ projects) to be transformed in a National Jurisdictional REDD+ Regulatory Program Approach that will address the compliance of the ER PD Methodological Framework (especially on the Legal Components of the Benefit Sharing Mechanism, ERs Title Transfer and Double Counting Mechanisms).

The criteria is met.

**C 29 The ER Program provides a description of the benefit-sharing arrangements for the ER Program, including information specified in Indicator 30.1, to the extent known at the time.**

Description of benefit-sharing arrangements [16.1 in ER-PD of 15 Jan. 2016]

**YES**

The BSP is currently being designed and is not yet available. It is stated in the ERPD that it will be made publicly available prior to ER-PA signature, and as soon as it is approved by the GoM. A separate document outlining the latest thinking on the BSP was provided to the TAP team, therefore showing the latest information available.

The criteria is met.

**C 30 The Benefit Sharing Plan will elaborate on the benefit-sharing arrangements for Monetary and Non-Monetary Benefits, building on the description in the ER Program Document, and taking into account the importance of managing expectations among potential beneficiaries**

**Ind 30.1** The Benefit-Sharing Plan is made publicly available prior to ERPA signature, at least as an advanced draft, and is disclosed in a form, manner and language understandable to the affected stakeholders for the ER Program<sup>12</sup>. The Benefit-Sharing Plan contains the following information:

The categories of potential Beneficiaries, describing their eligibility to receive potential Monetary and Non-Monetary Benefits under the ER Program and the types and scale of such potential Monetary and Non-Monetary Benefits that may be received. Such Monetary and Non-Monetary Benefits should be culturally appropriate and gender and inter-generationally inclusive. The identification of such potential Beneficiaries takes into account emission reduction strategies to effectively address drivers of net emissions, anticipated implementers and geographical distribution of those strategies, land and resource tenure rights (including legal and customary rights of use, access, management, ownership,

**N.A**

<p>etc. identified in the assessments carried out under Criterion 28), and Title to ERs, among other considerations.</p> <p>Criteria, processes, and timelines for the distribution of Monetary and Non-Monetary Benefits.</p> <p>Monitoring provisions for the implementation of the Benefit-Sharing Plan, including, as appropriate, an opportunity for participation in the monitoring and/or validation process by the Beneficiaries themselves</p> <p>[Description of benefit-sharing arrangements 16.1]</p>	
<p>A preliminary synthesis outlining the latest thinking on the BSP was provided to the TAP team, therefore showing the latest information available. This draft identifies: categories of potential beneficiaries, types of benefits to be received (but does not estimate the scale of those benefits), and some criteria and processes regarding monetary benefits are discussed but not finalized. The TAP recommends that a more detailed and specification description of the benefits scale and mechanisms to be implemented should be done.</p> <p>In any case and taking in consideration that the Indicator express that “The Benefit-Sharing Plan should be made publicly available prior to ERPA signature, at least as an advanced draft, and is disclosed in a form, manner and language understandable to the affected stakeholders for the ER Program, we consider that is still time to the Host Country to develop and present a more detailed and formal BSP before the ERP Signature. We recommend that the host country work on the finalization and formalization of the BSP.</p> <p>The indicator is not applicable at this stage, whereas the Indicator under the MF states that the plan and/or an advanced draft should/could be publicly available before the signing the ERPA.</p>	
<p><b>C 31 The benefit-sharing arrangements are designed in a consultative, transparent, and participatory manner appropriate to the country context. This process is informed by and builds upon the national readiness process, including the SESA, and taking into account existing benefit-sharing arrangements, where appropriate</b></p>	
<p><b>Ind 31.1</b> The Benefit-Sharing Plan is prepared as part of the consultative, transparent and participatory process for the ER Program, and reflects inputs by relevant stakeholders, including broad community support by affected Indigenous Peoples. The Benefit-Sharing Plan is designed to facilitate the delivery and sharing of Monetary and Non-Monetary Benefits that promote successful ER Program implementation. The Benefit-Sharing Plan is disclosed in a form, manner and language understandable to the affected stakeholders of the ER Program</p> <p>[Description of stakeholder consultation process 5.1]</p> <p>[Summary of the process of designing the benefit-sharing arrangements 16.2]</p>	<p><b>N.A</b></p>
<p>Even though the country is doing an intense effort to design the legal mechanism of Benefit Sharing, and is already an existing provision on law establishing a general rule of “20% Revenue Benefit Sharing Mechanism”, the ERPD doesn’t demonstrate that the Benefit Sharing Mechanism is designed. Also Consultations are still ongoing in accordance to, but not finished as required by the Methodological Framework. The TAP recommends that the host country keep developing the BSP including the Consultation Procedures in a comprehensive manner to achieve the compliance with the MF.</p> <p>Taking in consideration that in accordance with the MF the Final BSP and/or an advanced draft should/could be publicly available before the signing the ERPA. we recommend the host country to proceed with the development of the BSP.</p> <p>As stated on criteria 30.1 we consider that the indicator is not applicable at this stage,</p>	
<p><b>C 32 The implementation of the Benefit-Sharing Plan is transparent</b></p>	
<p><b>Ind 32.1</b> Information on the implementation of the Benefit-Sharing Plan is annexed to each ER Program monitoring report and interim progress report and is made publicly available [16.1]</p>	<p><b>N.A</b></p>

Only applicable at the time of verification.

### C 33 The benefit-sharing arrangement for the ER Program reflects the legal context

**Ind 33.1** The design and implementation of the Benefit-Sharing Plan comply with relevant applicable laws, including national laws and any legally binding national obligations under relevant international laws

**NO**

[Description of the legal context of the benefit-sharing arrangements 16.3]

There are not yet a final Benefit Sharing Plan described on the ERPD. Even the country describes exhaustively the existing 20% mechanism, regulated by the Ministerial Diploma 93/2, that establishes "... the mechanisms for channeling 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, stipulating that the beneficiaries need to be organized in a legalized association with a bank account to be able to receive the monetary benefits" this mechanism doesn't address the overall needs of the ER PD Program.

A stated on Section 15.1 - Description of benefit-sharing arrangements by the ER PD Host Country :

..." it should be noted that the BSP is currently being designed (see section 15.2) and is not yet available. As required by criterion 30.1 of the FCPF MF (2016a), it will be made publicly available prior to ER-PA signature, and as soon as it is approved by the GoM. An advanced draft will already be ready at the time of the ER-PD final draft submission.

Taking in consideration that statement there is not yet (at the time of the TAP Assessment Report) no formal and final definition of the legal design of the Benefit Sharing Mechanism.

The criteria is not met.

### C 34 Non-Carbon Benefits are integral to the ER Program

**Ind 34.1** The ER Program outlines potential Non-Carbon Benefits, identifies priority Non-Carbon Benefits, and describes how the ER Program will generate and/or enhance such priority Non-Carbon Benefits. Such priority Non-Carbon Benefits should be culturally appropriate, and gender and inter-generationally inclusive, as relevant

**YES**

[Outline of potential Non-Carbon Benefits and identification of Priority Non-Carbon Benefits 17.1 in the reviewed ER-PD of 15 January 2016]

The ER Program outlines potential Non-Carbon Benefits and identifies priority Non-Carbon Benefits. The ER PD Program also describes how the ER Program will generate and/or enhance such priority Non-Carbon Benefits.

Also the priority Non-Carbon Benefits appears to be culturally and gender appropriate.

The ER PD Program describes in detail options to define the Non Carbon Benefits such as:

- 1) The assessment of performance: beneficiaries are allocated a part of the benefits according to their measured performance, assessed as the actual reduction of emissions against a specific baseline;
- 2) The use of proxies: beneficiaries are allocated a part of the benefits according to an indirect measure of their participation in the reduction of emissions;
- 3) The estimation of costs: beneficiaries are allocated a part of the benefits according to the cost of the activity that they are implementing and which contributes to reducing emissions;

<p>4) Non-conditional payment: beneficiaries are allocated a part of the benefits on the principle that they are in the ER Program area. This implies that the ER payments will (only) be based on land ownership and the recognition of Local Communities and smallholders' DUATs.</p> <p>The criteria is met.</p>	
<p><b>Ind 34.2</b> Stakeholder engagement processes carried out for the ER Program design and for the readiness phase inform the identification of such priority Non-Carbon Benefits</p> <p>[Description of stakeholder consultation process 5.1]</p>	YES
<p>The ERPD describes in detail the Stakeholder engagement processes carried out for the ER Program design and for the readiness phase, inform the identification of such priority Non-Carbon Benefits.</p> <p>The criteria met.</p>	
<p><b>C 35 The ER Program indicates how information on the generation and/or enhancement of priority Non-Carbon Benefits will be provided during ER Program implementation, as feasible.</b></p>	
<p><b>Ind 35.1</b> The ER Program proposes an approach utilizing methods available at the time to collect and provide information on priority Non-Carbon Benefits, including, e.g., possibly using proxy indicators. If relevant, this approach also may use information drawn from or contributed as an input to the SIS</p> <p>[Approach for providing information on Priority Non-Carbon Benefits 17.2]</p>	YES
<p>The ER Program proposes an approach utilizing methods available at the time to collect and provide information on priority Non-Carbon Benefits. Also The ER Program identifies several potential options/examples of proposals and options for BS arrangements.</p> <p>The criteria is met.</p>	
<p><b>Ind 35.2</b> Information on generation and/or enhancement of priority Non-Carbon Benefits will be provided in a separate annex to each ER Program monitoring report and interim progress report, and will be made publicly available</p>	N.A
<p>Only applicable at the time of verification.</p>	
<p><b>C 36 The ER Program Entity demonstrates its authority to enter into an ERPA and its ability to transfer Title to ERs to the Carbon Fund</b></p>	
<p><b>Ind 36.1</b> The ER Program Entity demonstrates its authority to enter into an ERPA with the Carbon Fund prior to the start of ERPA negotiations, either through:</p> <p>i. Reference to an existing legal and regulatory framework stipulating such authority; and/or</p>	YES

<p>ii. In the form of a letter from the relevant overarching governmental authority (e.g., the presidency, chancellery, etc.) or from the relevant governmental body authorized to confirm such authority.</p> <p>[Authorization of the ER Program 18.1]</p>	
<p>The ER Program Entity is defined as the Ministry of Economy and Finance (MEF).</p> <p>The Mozambican Ministry of Economy and Finance is responsible for managing and coordinating national financial planning process. It aims to ensure the integrated and balanced economic and social development of the country, through consolidating an integrated system of planning and implementing a sustainable and decentralized development strategy. According to TAP assessment the Ministry of Economy and Finance as the authority to sign the ER-PA.</p> <p>Nevertheless we noted that are missing some elements of identification on the ER PD text, such as :</p> <p>Main contact person, Title, Telephone, and e-mail. We recommend that those elements could be completed.</p> <p>The Criteria is met.</p>	
<p><b>Ind 36.2</b> The ER Program Entity demonstrates its ability to transfer to the Carbon Fund Title to ERs, while respecting the land and resource tenure rights of the potential rights-holders, including Indigenous Peoples (i.e., those holding legal and customary rights, as identified by the assessment conducted under Criterion 28), in the Accounting Area. The ability to transfer Title to ERs may be demonstrated through various means, including reference to existing legal and regulatory frameworks, sub-arrangements with potential land and resource tenure rights-holders (including those holding legal and customary rights, as identified by the assessments conducted under Criterion 28), and benefit-sharing arrangements under the Benefit-Sharing Plan</p> <p>[Transfer of Title to ERs 18.2 ]</p>	<p><b>NO</b></p>
<p>The ER Program describes in an exhaustive and detail way the implications of the land and resource regime assessment for the ER Program Entity's ability to transfer Title to ERs to the Carbon Fund, but acknowledges that are still missing important regulatory procedures to be enacted by the Host Country to establishes the fully competence and the ability of the ER Program Entity to transfer directly the ER Titles to the Carbon Fund:</p> <p>..." The analysis ... shows that the State can transfer titles over ERs treated as products of a process of "use and development" of forest resources, either by the State itself through a REDD+ or ER project, or by other actors who agree that the State retains its property rights over any ERs that are produced by non-ER activities.</p> <p>However, later discussions also indicate that the State may not have an automatic right to freely transfer ER titles in every part of the ER Program area. There are many other rights over the resources in question that must be taken into account, including though the concepts of DUAT, DUAF and community public domain. For now, the way in which the State, through its authorized GoM agency, handles the sale and transfer of ER titles is therefore determined by the territorial category of the area where the forest resources in question are located. In addition, the sector that will negotiate and sign international agreements for the transfer of ER titles in the name of the State still has to be clearly designated by law. Appropriate legislation, and absolute confidence in the rule of law and in the transparency of the registry systems that are established (see section 18), are both critical requirements for Mozambique being able to guarantee the legitimacy of the ER titles which it aims to transfer to the Carbon Fund.</p> <p>To this aim, as previously stated, a revision of the REDD+ Decree is currently conducted. This revision will help establish the uncontested ability of the ER Program entity to transfer titles to ERs to the Carbon Fund in full understanding and consideration of local community's rights and in full compliance of the methodological requirement of the FCFP. Box 10 summarizes the main elements that are currently considered as necessary and which will be included in the new REDD+ Decree, which is expected to be approved before the submission of the final ER-PD draft. This ER-PD section will be updated accordingly.</p> <p><b>Box 3: Main points of attention for the current revision of the REDD+ Decree</b></p>	

According to Tanner (2017c), the main points of attention for the current revision of the REDD+ decree are:

- Reaffirmation of state ownership of carbon, and of ERs as the product of "use and development" which are tradeable and can be owned by the State and/or the user-developer (firm, local community, etc.);
- Detailed regulations for developing, approving and implementing new REDD+ projects, both private and public and how to reach agreements with relevant parties;
- Sections covering the question of institutional mandates:
  - Which sector handles all negotiations on behalf of the State with regards to ER titles *[this must clearly and unequivocally address the need for the "uncontested ability" of the selected sector to act on behalf of the State – a "legal and regulatory framework stipulating such authority" (as per Criteria 36 of the FCPF MF)]*
  - Which sector distributes ER-payments and through which central level mechanism;
  - Which sector sets up, runs and oversees the process of ER titling, registration, and the management of ER sales and subsequent movements on national and international markets.
- The respective roles and mandates of devolved state bodies with devolved powers and functions over natural resources and other governance issues, when it comes to ER ownership, participation in returns from sales, and local distributional issues;
- Benefit-sharing mechanisms and legally prescribed parameters for determining which share of ER-payments are passed down to stakeholders at different levels, including local community structures.

Following the preliminary work of the REDD+ Decree Review Committee, other elements will also be considered:

- Institutionalization of the SIS platform;
- Clear definition of the main REDD+ concept, including baseline, inventory and carbon credits (ER titles);
- Setting of the REDD+ jurisdictional framework, which should be part of the Constitutional one;
- Designation of the institutional entities respectively responsible for (i) regulation; (ii) monitoring; (iii) validation and verification.
- Interaction of private projects with national REDD+ framework and associated rules.

Taking in consideration the information provided on the ERPD and the status of the country REDD Legal Framework at the time/date of the TAP assessment we recommend the finalization of the revision/updating of the regulatory proposed provisions to clarify the ability of the ER Program Entity to transfer directly the ERs Title to the Carbon Fund.

The criteria is not met.

**Ind 36.3** The ER Program Entity demonstrates its ability to transfer Title to ERs prior to ERPA signature, or at the latest, at the time of transfer of ERs to the Carbon Fund. If this ability to transfer Title to ERs is still unclear or contested at the time of transfer of ERs, an amount of ERs proportional to the Accounting Area where title is unclear or contested shall not be sold or transferred to the Carbon Fund

[Transfer of Title to ERs 17.2 ]

**NO**



See TAP comments on Indicator 36.2. The criteria is not met.	
<b>C 37 Based on national needs and circumstances, the ER Program works with the host country to select an appropriate arrangement to avoid having multiple claims to an ER Title.</b>	
<p><b>Ind 37.1</b> Based on national needs and circumstances, the ER Program host country has made a decision whether to maintain its own comprehensive national REDD+ Program and Projects Data Management System, or instead to use a centralized REDD+ Programs and Projects Data Management System managed by a third party on its behalf. In either case of a country's use of a third party centralized REDD+ Programs and Projects Data Management System, or a country's own national REDD+ Programs and Projects Data Management System, the indicators below apply</p> <p>[Data management and Registry systems to avoid multiple claims to ERs 18.2]</p>	YES
<p>Yes, the ER Program host country has already made the decision to maintain its own comprehensive national REDD+ Program and Projects Data Management System. As stated on the ER PD: ..." Mozambique will implement and maintain its own comprehensive national REDD+ Program and Projects Data Management System, linking this system with:</p> <ul style="list-style-type: none"> <li>- The National Forest Monitoring System for REDD+, specifically with the Participatory MRV System, to check consistency regarding national/program/project FRELs, MRV data (AD and EFs), and Safeguards Information;</li> <li>- The GHG Inventory, to check consistency on Forest related emissions;</li> <li>- The National Appropriate Mitigation Actions (NAMA) and Clean Development Mechanism (CDM) Registries, to track other mitigation initiatives, thus avoiding double accounting;</li> <li>- The carbon project standards registries, including:</li> <li>- The Markit Registry, providing tool for managing global carbon, water and biodiversity credits. The Markit Registry enables to track environmental projects and to issue, transact and retire serialized credits. Markit Registry includes: Plan Vivo, VCS and Gold Standard.</li> <li>- VCS (Verified Carbon Standard) projects database, acting as a central storehouse of information on all VCS, CCB (the Climate, Community &amp; Biodiversity Standards) and California projects managed by VCS.</li> <li>- The REDD+ Program and Project Data Management System comprises the following functionalities:</li> <li>- Registering and Managing official approvals and collecting/distributing information on REDD+ project/program proponents;</li> <li>- Checking, evaluating and validating this information with reference to other records from other linked registries related to emission reduction projects and programs.</li> </ul> <p>The Criteria is met.</p>	
<p><b>Ind 37.2</b> A national REDD+ Programs and Projects Data Management System or a third party centralized REDD+ Programs and Projects Data Management System needs to provide the attributes of ER Programs, including:</p> <ul style="list-style-type: none"> <li>i. The entity that has Title to ERs produced;</li> <li>ii. Geographical boundaries of the ER Program or project;</li> <li>iii. Scope of REDD+ activities and Carbon Pools; and</li> <li>iv. The Reference Level used.</li> </ul> <p>An ER Program for the Carbon Fund should report its activities and estimated ERs in a manner that conforms to the relevant FCPF Methodological Framework C&amp;Is</p> <p>[Data management and Registry systems to avoid multiple claims to ERs 18.2]</p>	NO

Even the ER Program describes the intention that will accomplish with the requisites of the Criterion 37.2 as described in Section 18, there is still the lack of the Data Base structure and important definitions that need to be made (especially on the management of the Data Base and administrative guidelines) :

..." As required by criterion 37.2 of the FCPF MF (FCPF, 2016a), the information collected and distributed via the Internet MRV platform will include:

- The entity that has Title to ERs produced (the full legal and beneficial title and exclusive right to ERs contracted for under the ERPA);
- Geo-referenced information on the location of REDD+ projects/programs (boundaries, buffers, zoning, areas of intervention, etc.);
- The scope of REDD+ activities and Carbon Pool;
- The reference levels at different scales;
- MRV data to specific REDD+ projects/programs;
- Safeguards plans in specific REDD+ projects/programs;
- CF payments and benefit sharing for specific REDD+ projects/programs.

The country states on the ER PD Program at Box 11 that intends to take those decisions in a short period of time:

#### Box 4: Next steps for the REDD+ Program and Project Data Management System

The next step in the implementation of the national REDD+ Program and Project Data Management System in Mozambique is the approval of its administrative procedures. This should be stated in the new REDD+ Decree, which is currently being developed, and which is expected to happen before the submission of the final ER-PD draft to the FCPF CF. It should also be decided which institutions will be responsible for hosting the system. For now, the entity responsible for the coordination of the national REDD+ Program and Project Data Management System is DINAF, with support from the UT REDD+.

The criteria are not met.

**Ind 37.3** The information contained in a national or centralized REDD+ Programs and Projects Data Management System is available to the public via the internet in the national official language of the host country (other means may be considered as required).

[Data management and Registry systems to avoid multiple claims to ERs 19.2]

**NO**

Even the country states that they will made available the information to the public via the Internet, in Portuguese language, because there are not all the elements of the database, the TAP considers that the Criterion in not met (nevertheless the country demonstrates a clear will to address the issue) :

..." Accordingly, with criterion 37.3 of the FCPF MF (FCPF, 2016a), the information contained in this system will be made available to the public via the Internet, in Portuguese (national official language in Mozambique). Admittedly, the REDD+ Program and Project Data Management System is considered as part of the REDD+ MRV system in Mozambique and, as such, will for now be located on the same web platform, along with the PMRV, SIS and FGRM mechanisms - see Annex 9 - Characteristics of the Web portal for MRV REDD+ in Mozambique If it is necessary, it will easily be transferred to another institution later on.

The criteria are not met.

<p><b>Ind 37.4</b> Administrative procedures are defined for the operations of a national or centralized REDD+ Programs and Projects Data Management System; and an audit of the operations is carried out by an independent third party periodically, as agreed with the Carbon Fund</p> <p>[Data management and Registry systems to avoid multiple claims to ERs 18.2]</p>	<p><b>NO</b></p>
<p>Even the ER Program states that intends to accomplishes with the requisites of the criterion, is clear that at the present moment of this assessment is not met, as stated by the country on the ER PD text in Section 18.2:</p> <p>... “This REDD+ Project/Program Data Management System should also support independent verification and validation of REDD+ Projects and Programs. In order to comply with criterion 37.4 of the FCPF MF (FCPF, 2016a), the administrative procedures for operating the national REDD+ Programs and Projects Data Management System will be prepared in the short term and will be ready before the submission of the ER-PD final draft to the FCPF CF. Finally, an audit of the operations will be carried out by an independent third party periodically, as agreed with the Carbon Fund, once the ER-PA comes into operation.</p> <p>The criteria are not met.</p>	
<p><b>C 38 Based on national needs and circumstances, ER Program host country selects an appropriate arrangement to ensure that any ERs from REDD+ activities under the ER Program are not generated more than once; and that any ERs from REDD+ activities under the ER Program sold and transferred to the Carbon Fund are not used again by any entity for sale, public relations, compliance or any other purpose</b></p>	
<p><b>Ind 38.1</b> Based on national needs and circumstances, the ER Program host country has made a decision whether to maintain its own national ER transaction registry, or instead to use a centralized ER transaction registry managed by a third party on its behalf</p> <p>[Data management and Registry systems to avoid multiple claims to ERs 18.2]</p>	<p><b>NO</b></p>
<p>The ER Program host country didn’t take until the date of this assessment the decision whether to maintain its own national ER transaction registry, or instead to use a centralized ER transaction registry managed by a third party on its behalf, as expressed on Section 18.2”</p> <p>...” the GoM has not yet decided whether to maintain its own comprehensive national ER Transaction Registry or to use a centralized ER Transaction Registry managed by a third party on its behalf, as required by criterion 38.1 of the FCPF MF (FCPF 2016a). In order to reach a decision soon, and before the submission of the ER-PD final draft, several options are currently being analyzed.</p> <p>Based on Mozambique’s national needs and circumstances, two types of ER Registries and issuing procedures are considered:</p> <p>i. Projects and programs registered in a Voluntary Standard (VCS, Golden Standard, CCB, Plan Vivo):</p> <ul style="list-style-type: none"> <li>- Rules and methodologies are issued by that voluntary standard;</li> <li>- Each voluntary standard also provides an ER Registry and issuing procedures.</li> </ul> <p>ii. ER Program and projects supported by the FCPF Carbon Fund:</p> <ul style="list-style-type: none"> <li>- Rules and methodologies are issued by FCPF CF Methodological Framework;</li> <li>- An ER Registry will be required as a prior condition to ERPA signature, with several options under considerations: <ul style="list-style-type: none"> <li>- Use an existing "independent" or "private" GHG registry tool, such as the World Bank CARS, which probably satisfies the needs of Carbon Fund participants. A specific ER Unit would be created;</li> <li>- Use any "established" GHG Registry (voluntary standard or Annex 1 countries registries), where potential buyers could already have an account open;</li> </ul> </li> </ul>	

<p>- Create a new registry for the issuing REDD Country. This new registry could be either: (i) developed in-house, or integrated from existing software under license: or (ii) provided 'as a service' (IT or IT &amp; operations) by a GHG Registry Vendor.</p> <p>The GoM still need to make a final decision on this scheme, according to the forecasted advantages and inconvenient of each model, as described in Table 81.</p> <p>The criteria is not met.</p>	
<p><b>Ind 38.2</b> The national or centralized ER transaction registry reports ERs for the Carbon Fund using the accounting methods and definitions described above in the MF</p> <p>[Data management and Registry systems to avoid multiple claims to ERs 19.2]</p>	<p><b>NO</b></p>
<p>Even the ER Program host country declares on Section 18.2 the intention of addressing and acting in conformity with the requisites of the criteria:</p> <p>... "In any case this national or centralized ER transaction registry will reports ERs for the Carbon Fund using the accounting methods and definitions described in the FCPF CF MF and allowing an operational guidance that clarifies the roles and responsibilities of entities involved in the ER transaction registry, as well as rules for operation of the registry..."</p> <p>The Country is also clearly determined to address that issue on the final ER-PD draft submission as stated on Section 18.2 – Box 12:</p> <p style="text-align: center;"><b>Box 5: Next steps for the ER Transactions registry</b></p> <p>The next steps for the implementation of the ER Transactions registry implies for the GoM to make a final decision on whether to maintain its own comprehensive national ER Transaction Registry or to use a centralized ER Transaction Registry managed by a third party on its behalf. It should also be decided where to host the registry and the final institutional arrangements linked to its management, through a well-defined operational guide. For now, discussions within the REDD+ Decree Review Committee are in favor of:</p> <ul style="list-style-type: none"> <li>• The ER Transactions Registry being managed by the MEF in collaboration with the FNDS;</li> <li>• Potential byers having the obligation to register with the MEF prior to transactions;</li> <li>• The GoM having its own comprehensive national ER Transaction Registry.</li> </ul> <p><i>Those elements are still being discussed and will be definitely decided by the ER-PD final draft submission.</i></p> <p>Taking this in consideration, there are no Transaction Registry, neither operational guidelines, at the time of the TAP Report Assessment, the TAP considers that the criteria is not met.</p>	
<p><b>Ind 38.3</b> An independent audit report certifying that the national or centralized ER transaction registry performs required functions is made public.</p> <p>[Data management and Registry systems to avoid multiple claims to ERs 19.2]</p>	<p><b>NO</b></p>
<p>Even the ER Program host country states on Section 18.2 that intends to perform an independent audit report certifying that the national or centralized ER transaction registry performs the required functions and that this audit report will be publicly available, as stated on Section 18.2:</p> <p>..." Finally, an independent audit report certifying that the national or centralized ER transaction registry performs required functions will have to be made public...."</p>	

There are not yet at the time of this assessment neither the transaction registry, neither the operational procedures and/or guidelines to accomplish the requisites defined by this Indicator.

Taking this in consideration the TAP considers the criteria not met.

**Ind 38.4** Operational guidance exists, or is in advanced stage of preparation, that clarifies the roles and responsibilities of entities involved in the national or centralized ER transaction registry, as well as rules for operation of the registry.

[Data management and Registry systems to avoid multiple claims to ERs 19.2]

**NO**

Even the Country is clearly determined to address that issue on the final ER-PD draft submission as stated also on Section 18.2 – Box 12, the criteria is not clearly met at the date for the lack of any kind of “Operational Guidance”:

#### Box 6: Next steps for the ER Transactions registry

The next steps for the implementation of the ER Transactions registry implies for the GoM to make a final decision on whether to maintain its own comprehensive national ER Transaction Registry or to use a centralized ER Transaction Registry managed by a third party on its behalf. It should also be decided where to host the registry and the final institutional arrangements linked to its management, through a well-defined operational guide. For now, discussions within the REDD+ Decree Review Committee are in favor of:

- The ER Transactions Registry being managed by the MEF in collaboration with the FNDS;
- Potential byers having the obligation to register with the MEF prior to transactions;
- The GoM having its own comprehensive national ER Transaction Registry.

*Those elements are still being discussed and will be definitely decided by the ER-PD final draft submission.*

Taking this in consideration, the criteria is not met.

## **Annex 1 to the TAP technical assessment**