Forest Carbon Partnership Facility (FCPF)
Technical Assessment of the Advanced Draft ER-PD Madagascar
5 October 2017

I General Approach of the Review

The present report constitutes the second review by the TAP and is based on the Advanced Draft ER-PD of Madagascar, dated 19 September 2017. The first TAP review was conducted between 28 June and 31 August and included a joint TAP mission to Antananarivo, Madagascar, hold between 20 and 25 August 2017. The first full TAP report was submitted to the FMT on September 1, 2017. For this second TAP review, undertaken between September 25 and October 4, each TAP member reviewed the particular section of her/his expertise and commented on other sections as necessary. The TAP team coordinated its joint assessment work through e-Mail exchanges and skype calls.

As required, this second assessment was done based on the criteria and indicators developed in the Carbon Fund **Methodological Framework** (https://www.forestcarbonpartnership.org/carbon-fund-methodological-framework). In this second assessment report, the TAP reconfirms its comments and recommendations made of the first assessment where adequate (black text) and includes new assessment elements (red text), particularly in those sectors where in the first assessment the TAP had assessed the particular criteria or indicator with a "No".

PART 1 OF TECHNICAL ASSESSMENT: Summary

Period of the First Full Assessment: 25 September – 4 October 2017

Name of Assessment team members:

Juergen Blaser (REDD+policy issues, land-use and forestry; coordination of the TAP review; review of Part 1, Criteria 1 and 2, Indicators 27.1-27.2, 37.1-38.4; and the summary (with the team); **Florence Daviet** (safeguards and socio-economic assessment, particularly indicators 24-26.3, 31.1-32.1, 34.1-35.2); **Sandro Federici** (carbon accounting and assessment of the methodological approaches, particularly indicators 3.1 – 23); **Antonio Jose Ludovino Lopes** (legal and institutional issues, supported by a group of lawyers working with the FMT, particularly indicators 28.1-28.3, 33.1 and 36.1-36.3) and **Julia Randimbisoa** (national expert with focus on policy and social issues).

Summary Assessment of the Quality and Completeness of the ER-PD:	Indicators	1st Assessment	2nd assessment
Overall, the TAP notes that Advanced Draft ER-PD is based on intensive work undertaken by the ER-Program team of Madagascar between June and September 2017. It includes many of the comments and recommendations made by the TAP during the TAP mission and in the first TAP report dated of September 1, 2017. In conclusion, many of the critical elements have been taken into account and have been adequately addressed in the Advanced Draft ER-PD (as far as possible in the short time frame that the ER-Program team had as its disposal). Madagascar proposes an ER-Program at jurisdictional scale over a total area of about 6.2 million ha situated in the Eastern humid climatic belt of the island. The jurisdictional area has been carefully selected to include communes in five administrative regions where critical criteria for program implementation have been identified to support efficiency in the implementation of proposed ER-Program activities over the five-year ERPA time frame (p. 47 of the ERPD). A broad			

watershed/landscape approach is proposed for implementation ER emission reduction projects through sectoral and cross-sectoral actions, implementing a variety of direct and indirect project-based ER activities, applying adaptive management. Within the ER program area, two large-scale existing pilot VCS projects dealing with reducing deforestation and biodiversity conservation are implemented and proposed to be fully integrated in the ERPA: Makira (managed by WCS) and CAZ forest corridor (managed by CI).

In the TAP's view, the proposed overall intervention strategy in the jurisdictional area is justified by the socio-cultural complexity in the land-use and the high level of poverty, which is the main driver of deforestation and forest degradation not only in the jurisdictional area but in the country overall. Sectorial approaches are proposed through three main REDD+ strategies, avoiding deforestation, addressing degradation and enhancement of sinks, applied in four zones for an integrated watershed management approach (as illustrated by Figure 10, page 75 of the ERPD). ER activities include interventions in land-use management (agriculture and livestock production, with both approaches: subsistence and cash crop management; forest management, including FLEG activities, management planning for protected areas and forest restoration, community forestry, fuelwood management; the promotion of renewable energy and as a cross-cutting approach the valuation of ecosystem services, particularly valuating biodiversity. 70% of the ER program area fall in the upper watershed areas that primarily include protected areas with largely undisturbed forests, buffer zones and forest corridors and areas managed by local communities (COBAs) which includes mainly buffer zone management. The area is threatened by heavy shifting cultivation activities ("tavy"). The remaining 30% of the ERP is located in lower laying watershed areas throughout the jurisdictional area that include a mosaic of land-uses comprising agriculture (wet rice and agroforestry and perennial agroforestry crops), degraded and secondary forests and urban lands.

<u>General observations by the TAP on the Advanced Draft ER-PD</u>:

- The Draft ER-PD document has been thorough reviewed and streamlined. The reviewed ER-PD is more focused on issues that concern the jurisdictional area and the ER-PD explains clearly ER-Program's intervention, the main actors, the main intervention areas concerned by ERPA activities and the priorities in the ER activities, e.g. by sub-region. It also includes a regional spatialisation of priority activities additional to the upfront investment in the ERP-area (annex I of the ERPD, page 276);
- The ER-Program area with its 14 watersheds is now clearly defined and presented through proper mapping, including the criteria of selection, provide necessary background information on the ERP-region (communes included in the regions of Analanjirofo, Alaotra Mangoro, Sava, Sofia and Atsinanana); however there is still a need to clearly explain why the important watershed/forest massif of Masoala has not been included in the jurisdictional area;
- Data on forest and land-use are provided in the Advanced Draft ER-PD and definitions (e.g. "primary forest", "modified primary forest", "degraded forest", and "deforested primary forests") clarified.
- Policies and other activities already in place in the ER-PD area are well described and their link to the ER-Program noticeably outlined.
- In respect to the management of the ER-Program the TAP recognizes that the Ministry of Finance and Budget (MFB) is now included as responsible party to sign the ERPA jointly with the MEEF. The TAP however reiterate its recommendation to reflect on the need for a more prominent role of other ministries in the implementation of the ERPA, e.g. the Ministry dealing with territorial management, considering that major challenges are linked to issues relating to decentralization of forest conservation, forest management, forest and land tenure and use.

▪ The financial figures have been reviewed and clarification given on the requested finance from FCPF carbon fund. ▪ The TAP still reiterates the importance to give clearer indication on the role of the private sector in realizing ER activities and potential private sector involvement in investment finance.			
II. Level of Ambition → Criteria 1 – 2, including issues relating to legal aspects The ER-Program is ambitious and complex in its intervention strategies and proposes a wide array of ER-activities under the label of "REDD+" in a very important jurisdictional area in respect to high biodiversity and high pressure on the resources due to extreme poverty. The TAP reiterates its assessment of its first review that the detailed description of the proposed activities (pages 79-96) is at the same time to large (considering the several dozens of activities proposed and in the same time to superficial as the activities are simply a list of all possible activities that one can imagine to employ for the management at landscape level). Thus, the ERPD remains rather general when describing proposed direct and indirect interventions: while having addressed in general terms "landscape approaches/landscape restoration", it does not give sufficient precision on what will be different in the activity part against BAU (including the already existing work done by the GoM by its own and with international assistance, including the already managed REDD+ VCS areas). E.g. it is stated in the document that agroforestry promotion is based on "new approaches" and on changing "environmental conditions" such as climate change, but the proposed measures are the same applied in the region since decades: vanilla, coffee, clove, cocoa….. Bio-prospecting is mentioned, however, no precision is given if there are new frontiers that could justify such interventions. Similar observations can be made for NTFPs and the selection of reforestation (in degraded forests) and afforestation species. For the R&A, a wide array of local tree species has been researched in the recent past, but there is no indication in the ER-PD that such experience is considered to be used. Some statements such as "the GoM has begun to consider the important role of reforestation…." (p. 85) is simply wrong, as reforestation has played an important role in forest and land-use policies in Madagascar since decades. Overall, the ERP area is clearly delimitated as being the central piece of the remaining humid tropical forest area of Madagascar with a high level of biodiversity and endemism of species of flora and fauna. Based on the information recent information received, the TAP recognizes that the ER-PD demonstrates that it addresses a significant portion of forest-related emissions and removals and landscape scale and defines areas with high forest carbon stocks, specific watershed features and particular efficiency criteria. The TAP however still wants to put on record that, when studying the interactive forest maps of ONE (http://www.perr-fh-mada.net/), within the proposed jurisdictional area, there are large parts with high deforestation patterns (grossly between Lac Aloatra and the southern buffer zone of Makira) where there is very high deforestation in heavily degraded forest areas. The ER-Program, for reasons that have been well explained in the ERPD, focuses first on those regions where REDD+ has the highest changes to show tangible results in a 5-year time frame (see ambitions and strategic rational focuses on protected areas, including the CAZ and Makira area where obviously are the large patches of intact forests, but less deforestation dynamics. It is in this context not understandable for the TAP why the important zone of Masoala is not included in the ER-Program area. The TAP recognizes however that the document presents well the overall problems and challenges of poverty driven deforestation and forest degradation in a jurisdictional area described as globally important for biodiversity conservation. The revised ERPD well summarizes the work done in the readiness phase (R-Package), (pages 30-33 of the ERPD) and explains well the link of the jurisdictional ER-Program with the national REDD+	**1.1** **1.2** **2.1**	**Yes** **Yes** **Yes**	

strategy that addresses DD problematic in different socio-cultural, economic and ecological environments. Overall, the jurisdictional area fits with the definition of the methodological framework. The TAP also notes that the ER Program demonstrates the ability to execute and comply with existing international laws and national legal framework. The ER Program and national legislation defines ERs as a "service/activity" able to transfer the ERs titles to the Carbon Fund. While the TAP recognizes that overall the accounting area is of significant scale, there is a need at this early stage of ER-PD development to thoroughly review the legal aspects of having included two pre-existing VCS REDD+ projects established under the VCS – VM0007(Makira REDD+ Project, managed by the Government of Madagascar and WSC; and Ankeniheny-Zahamena Corridor (CAZ) REDD Project, managed by the Government of Madagascar and Conservation International) in the jurisdictional area destined to be part of the ERs to be transferred/included on the ERPA with the Carbon Fund. The TAP recommends to closely investigating on possible major legal/contractual limitations (ability to negotiate directly) and constraints (contractual limitations clauses with the project participants) that are linked with this integration. The legal conditions of including these two major areas need to be carefully reviewed (see details under Ind. 1.2, Part 2 of the TAP report). Also Madagascar should carefully evaluate the options of using a nested approach with these two major forest areas and also carefully review the recently approved GCF proposal of the GoM with CI and demonstrate that there is no risk of double accounting in respect to the CAZ area.			
III. Carbon Accounting **III (a) Scope and methods→ Criteria 3 – 6** The ER-PD identifies the REDD+ activities to be accounted for, namely (i) reducing deforestation; (ii) reducing emissions from forest degradation, and (iii) enhancing forest C stocks, although the latter is limited to afforestation of non-forest land and does not include restoring degraded forests. The Advanced Draft ER-PD defines forest degradation as a long-term reduction of forest carbon stocks due to anthropogenic disturbances resulting from canopy loss, not qualified as deforestation. Forest degradation represents the transition from a "primary" (dense) forest to a degraded forest or to agroforestry (mainly plantations of clove or other fruit trees) and the transition of degraded natural forest to agroforestry. Considering that the actions implemented by the project will significantly focus on the intensification and extension of agroforestry practices and that agroforestry is one of the forest types within the class "plantations", the TAP notes that the Advanced Draft ER-PD extended its the scope to the activity reducing forest degradation since conversions of primary forests to agroforestry would otherwise not be captured. Estimates of GHG net emissions from deforestation and of CO_2 net removals from enhancement of C stocks, includes C stock changes in the biomass pool, the dead wood pool, litter and SOC. These two last are based on Tier 1; GHG emissions associated with fires in deforested areas are also included. Thus, significant sources have been included. ER-PD applies methods from the 2006 IPCC Guidelines. Although according to the FCPF Carbon Fund Methodological Framework the use of Tier 1 IPCC default factors for belowground biomass seems not to be justified. The TAP provides a number of observations that could strengthen the methodological framework applied (5.1). The methods applied are consistent with IPCC guidance, with the exception of how temporary losses or gains of tree cover are classified. The project assimilates them to permanent losses or gains and therefore estimates them under the activities	**3.1** **3.2** **3.3** **4.1** **4.2** **5.1** **6.1** **6.2**	**Yes** **Yes** **Yes** **Yes** **Yes** **Yes** **No** **No**	

deforestation or enhancement of C stocks. However, because both activities are estimated such deviation should not bias total estimates of C stock changes in the land reported. No information on methods and background data has been made publicly available so far. The TAP notices although that it is intended to disclose the relevant data in the national forest monitoring portal for REDD+ that will be set at the "laboratoire de geomatique".			
III (b) Uncertainties→ Criteria 7 – 9 The ER-PD provides detailed information on sources of uncertainties including their quantification. The Monte Carlo method has been applied to propagate uncertainties of background data and method to the estimated GHG fluxes. Uncertainty of emissions reductions has not been estimated, although the overall uncertainty of the reference level is estimated at 25%, and the "uncertainty discount factor" for emissions reductions has been selected at 4% according with the reference level uncertainty.	**7.1** **7.2** **8.1** **8.2** **9.1** **9.2** **9.3**	**Yes** **No** **No** **Yes** **Yes** **No** **No**	
III (c) Reference Level→ Criteria 10 – 13 The ER-PD demonstrates that the reference level has been calculated consistently with the FCPF methodological framework. Activity data have been taken for the period 2005-2015 (10 years) using the land cover and land cover change maps after correction with sampling data Regarding the contribution of deforestation to the reference level, no adjustment has been applied to the average annual historical emissions of the period 2005-2015. Because new drivers of deforestation are impetuously growing over the past years within the jurisdictional area, e.g. widespread mining, including the sapphire rush in the Ankeniheny-Zahamena Corridor, and because the increasing pressure of migration from south to north of Madagascar*and considering that the reference level is the counterfactual in absence of the project activities that will be implemented, it is recommended to take a 10-year reference period as close as possible to the submission date of the ER-PD. Regarding the contribution of enhancement of C stock to the reference level, it is noted that a reference level to measure the results of an activity aimed at enhancing C stocks is the C stock level of the land in absence of the mitigation activity, or analogously its C budget. Because enhancement of C stock activity occurs on abandoned degraded agricultural land such C budget may be conservatively assumed to be 0. This is consistent with the current treatment of afforestation under the Kyoto Protocol (i.e. gross-net accounting). However, the ERPD estimates the reference level for the activity enhancement of C stocks as the historical rate of afforestation projected into the future; such deviation has determined an overestimation of removals so making the calculated reference level conservative.	**10.1** **10.2** **10.3** **11.1** **11.2** **12.1** **13.1** **13.2** **13.3** **13.4**	**Yes** **Yes** **Yes** **Yes** **Yes** **Yes** **Yes** **n.a.** **n.a.** **n.a.**	
III (d) Reference Level, Monitoring & Reporting on Emission Reductions→ Criteria 14-16 The ER-PD proposes to apply the same methodology used for establishing the reference level for estimating actual GHG emissions and removals and consequently derive emissions reductions. Activity data are monitored through visual interpretation of a net of sample points identified on high and very high resolution imageries, biennially during the accounting period. No further measurements of C stocks are planned to be taken during the monitoring period; however, considering that they have not been derived from a complete forest inventory it is recommended to	**14.1** **14.2** **14.3** **15.1** **16.1**	**Yes** **Yes** **Yes** **Yes** **No**	

collect additional data on aboveground and belowground biomass C stocks during the monitoring period and to recalculate accordingly the reference level when accounting. In the further preparation of the ER Program, the ERP team should demonstrate that it has explored and developed adequate opportunities for community participation in monitoring and reporting.			
III (e) Accounting for Displacement (leakage) → Criterion 17 Although the ER-PD provides a complete assessment of sources of displacement and associated risks and provide a complete list of actions to be implemented to counteract such potential displacement of emissions, the presence of large forest area next to the jurisdictional area, especially of the extended Masoala forest region, see http://www.perr-fh-mada.net/rises concerns of displacement of fuelwood and charcoal production, illegal logging, NTFP gathering, from the jurisdictional area to the closest forest areas. Their inclusion in the jurisdictional area (if considered) would zero the risk of displacement. In addition the TAP proposes to reflect on the inclusion in the ER activities the monitoring of displacement of emissions in the forests adjacent and not comprised in the jurisdictional area by using e.g. the new initiative of Global Forest Watch in Madagascar.	**17.1** **17.2** **17.3** **17.4**	**Yes** **Yes** n.a. n.a.	
III (f) Accounting for Reversals→ Criteria 18 – 21 A systematic assessment of risks of reversals has been conducted following the FCPF Buffer Guidelines and the four main risk factors described: Lack of broad and sustained stakeholder support; Lack of institutional capacities and/or ineffective vertical/cross sectorial coordination; Lack of long term effectiveness in addressing underlying drivers. Exposure and vulnerability to natural disturbances. Further, for each risk factor, mitigation measures have been identified. The TAP acknowledges such assessment with the following comments according to which reported figures should be revised: (1) carbon rights remain unaddressed i.e. no law, policy or regulation, in Madagascar defines them and mitigation measures proposed are vague, so that in absence of a legal framework that univocally addresses carbon rights poses medium reversal risks, so that reported figures should be revised accordingly; (2) considering that natural disturbances causes just temporary loss of C that are generally followed by forest regrowth if no human activities determine a change in land use, and that such human-driven risks of reversal are already been addressed within previous factors, this risk should be considered just null (0%). After the end of the ERPA any reversal will be monitored and reported by the NFMS for REDD+ activities within the national inventory report to be submitted under the Paris Agreement and accordingly accounted for. So, no risk of permanence should materialize beyond the term of the ERPA. During the term of the ERPA, the ER Program accounts for reversals from ERs using option 2.	**18.1** **18.2** **19.1** **20.1** **20.2** **21.1** **21.2**	**Yes** **Yes** **Yes** n.a. n.a. **Yes** n.a.	
III (g) Accounting for ERs → Criteria 22 - 23 The expected emission reductions have been calculated according to a number of sub-targets (see page 215) for which neither the geographical boundaries, to which are applied, nor the associated emission reduction calculation have been reported. The total expected emission reduction is estimated at 12.36 million from reducing deforestation, 0.23 million from reducing degradation and at 2.02 million from enhancement of C sock in afforested areas. A total buffer of 22% (4% for uncertainties and 18% from risk of reversal) i.e. 3.22 million is estimated, although in table 30 the amount of reduction units to be allocated to the	**22** **23**	**No** **No**	

"reversals buffer" is erroneously calculated. Consequently the total expected emission reductions is estimated at 10.81 million across the five-year period, instead of the 13.93 million reported in table 30. It is not possible for the TAP at the current stage to check the correctness of the ex-ante accounted quantities since complete information on calculation is not provided. Reported values cannot be acknowledged without a deep analysis. Also the ERP-team still needs to provide detailed information on the risk of double accounting.			
IV. Safeguards **Actions undertaken to meet WB and Cancun Safeguards→ Criteria 24-26** The Advanced Draft ER-PD demonstrates through its design (chapter 14 and annex VI) how it intends to meet relevant World Bank social and environmental safeguards, and promotes and supports the safeguards included in UNFCCC guidance related to REDD+. The ER-PD team has done considerable work on a number of sections of the safeguard work, including related to the World Bank Safeguards, the grievance mechanism and SIS. The team has sought to increase gender, youth and civil society participation in the REDD+ discussions. More work presenting information in relation to the UNFCCC safeguards is needed. The final World Bank safeguard plans still need to be presented to stakeholders.	**24.1** **24.2** **25.1** **25.2** **26.1** **26.2** **26.3**	**Yes** **No** **Yes** **n.a.** **Yes** **Yes** **Yes**	
V. Sustainable Program Design and Implementation **V. (a) Drivers and Land Resource Tenure Assessment → Criteria 27-28** The causes and drivers of deforestation and forest degradation have been well described in general terms using the framework of Geist and Lambin (2001). The TAP proposes to further fine-tune the analysis for each of the 5 chosen regions in the ER-Program area as it is proposed in the ERPD that each region will have its particular REDD+ strategy/implementation plan and such plan will need to be based on a thorough DD analysis. The proposed ER-activities are overall well-described and correspond to the identified DD drivers. They address both sectoral and cross-sectoral issues and an attempt has been made to distinguish the proposed interventions in the different watershed situations. To further support a smooth implementation process, the TAP recommends providing a more precise description of the proposed ER-activities that are particular to the local contexts in the different sub-regions of ER-Program regions (particularly for hotspot deforestation and degradation areas) The proposed institutional arrangements at the regional level need clarification and eventually simplification. There is high complexity in the proposed arrangements and certainly, when implementation of ER activities will have been started the proposed institutional framework structure will be adapted to fulfill the variety of tasks (selection of projects, MRV, financial management, etc.). The TAP further noted that the ER-Program assessed land and resource tenure regimes in the readiness phase at the national level (i.e., SESA) and supplemented this assessment on issues related to land and resource tenure regimes in the ER-Program area. **V. (b) Benefit sharing → Criteria 29 – 33** A full description of the benefit-sharing arrangements is not yet completed, but recognizes that the Advanced Draft ER-PD does describe what has been done so far, there is still work to be done,	**27.1** **27.2** **28.1** **28.2** **28.3** **29** **30.1**	**Yes** **Yes** **Yes** **Yes** **Yes** **Yes** **Yes**	

especially in terms of local communities articulating what type of benefits they would prioritize and how they hope to receive benefits. The specific contractual arrangements between the GoM and the two REDD+ projects of CAZ and Makira are still being reviewed and need to be carefully studied. They have implications /limitations on the Benefit Sharing Agreement and the distribution of Revenues of the selling of ERs (VCUs), as existing benefit-sharing arrangements might not correspond to those that will be designed for the entire area in the ERPA. The TAP considers this as essential and asks for further clarification.	31.1 32.1 33.1	No n.a. Yes	
V. (c) Non-Carbon Benefits → Criteria 34 – 35 Potential non-carbon benefits have been listed in the document and how these benefits are linked to different REDD+ programs that communities might select. Priority non-carbon benefits have been identified at the national level, but not yet been identified at the regional level. However, there are plans to do so. Additional efforts are needed at jurisdictional level (outside the sphere of Makira and CAZ) to consult with local stakeholders on non-carbon benefits	34.1 34.2 35.1 35.2	Yes No Yes n.a.	
VI. ER Program Transactions **VI (a) ERPA Signing Authority and Transfer of Title To ERs → Criterion 36** The TAP notes that in the Advanced Draft ER-PD that one of the solutions proposed in the first TAP review that a Competent National Entity (the Ministry of Finance and Budget) represents together with the MEEF the country to entry into the ERPA has been taken into account to assure proper ERPA signing arrangements. The legal concept of carbon/environmental services is defined, but as the program, working at sub-jurisdictional only, might not have the ability to transfer the titles; this need still be explored by the ERPD team. Clarification on this matter is needed not only for the Carbon Fund but for all future program linked to the concept of ER transfer of titles.	36.1 36.2 36.3	Yes No No	
VI (b) Data Management and ER Transaction Registries → Criteria 37 - 38 As part of the Readiness process the country has not fully decided yet to maintain its own national REDD+ Program and Projects Data Management System with BNC REDD+ managing such a national REDD+ registry in the future (probably from early 2019 onwards). The registry would include new projects and the existing two REDD+ projects of Makira and CAZ, active in the jurisdictional ER-Program area and both registered with the Verified Carbon Standard (VCS). The administrative procedures are yet not defined for the operations of a national REDD+ Program and the Projects Data management system. The specific details of the operationalization of the ER transaction registry are yet to be defined. The TAP draws the attention to the fact that the current draft on registry does not refer to the inclusion of management of the reversal buffer or the uncertainty buffer. The TAP notes the remark of the ER-Program team that the development of such an ER transaction registry needs time and a strong expertise and that an intermediate solution with an external arrangement is explored in order to implement the ER-Program in due time.	37.1 37.2 37.3 37.4 38.1 38.2 38.3 38.4	Yes No No Yes Yes Yes n.a. No	
SUMMARY SCORE and overall comment:			

The ER-PD team rated the Revised ERPD of Madagascar very highly. It is an example of a Phase-3 REDD+ program that deals with complex land-use issues in a country with high deforestation and forest degradation that is mainly due to rampant and unremitting poverty. In the same time, Madagascar is a country with highest assets in global biodiversity that need to be protected and maintained. The ER-PD attempts to assess the complexity of land uses and proposes a package of ER-Program activities at landscape level to reduce deforestation, address forest degradation and enhance carbon sinks in a carefully chosen ER-Program area with focus on agriculture, forestry, energy and protected area management. The TAP noted that most of the critical comments and observations made in the review of the Draft ERPD of May 2017 have been addressed. It encourages the ER-Program team to further advance the proposal of the ER-Program and to carefully address the observations made. The TAP also noted that the REDD+ readiness package of Madagascar was submitted to the FCPF in September 2017 and approved by the Participants Committee. In addition the TAP is aware that the Final National REDD+ strategy of the country is in a thorough consultation process, as it is the case with the Validation of SESA and the development of the Complaints and Grievance Mechanism.

Based on the methodological framework (MF) and the evaluation of its first review of the ERPD draft, the TAP has rated the present **Advanced Draft ER-PD of Madagascar**, dated September 19, 2017 as follows:

Of a total of 78 criteria and indicators **49** (first TAP review 38**) criteria or indicators are met (yes)** and **17** (first review 31) **are yet not fully met (no).** Twelve indicators have been classified under do not apply (n/a) to the current assessment and need to be assessed in a later stage of the ERPA process.

The large majority of the criteria and indicators, including the most critical ones, are met. Some major issues need further consideration, mainly on carbon accounting and legal aspects. The TAP draws the attention principally on the follow issues:

- Specify the ER-activities, and clarify the legal issues as they relate to the contractual arrangements of the two VCS-REDD+ projects; this element needs to be addressed with urgency (only partly addressed in the Revised-ERPD)
- Need to revisit/renegotiate the existing contractual agreements with CI and WCS (vis a vis) the risk of double counting and the ability to transfer the title to the Carbon Fund; also in view of the forthcoming GCF project
- Review ex-ante accounted quantities and to provide a map and an associated table where all sub-targets are geo-referred and quantified; ensure that the total accounted quantity expected for reducing deforestation does not exceed the associated reference level
- Provide detailed information on the risk of double accounting
- Carefully address the safeguard issues that remains open
- Address the institutional arrangements at national and regional level in regards to the implementation of the ER-Program. There is need for further clarification and eventually simplification.
- Develop further the benefit-sharing mechanism taking also into account arrangements made in the existing REDD+ projects
- Address the issues listed under data management and registry system to the extent possible at the current stage

PART 2 OF TECHNICAL ASSESSMENT: DETAILED ASSESSMENT

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.

Ind. 1.1 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]	**Yes**

Yes, the TAP recognizes that a significant portion of forest-related emissions and removals are addressed by the draft ER-PD (however, see at this initial stage of the assessment the review of the TAP of indicator 1.2).

The jurisdictional ER Program area (extended over 6.23 million ha) includes a considerable part of Madagascar's remaining intact natural humid forests (in the ER-PD "primary forests"), about 1.28 million ha and an area of 0.93 million ha of degraded forests (in the ER-PD "modified natural forests"), as well as some areas with extreme high deforestation and degradation dynamics (http://www.perr-fh-mada.net/). The total humid forest area of Madagascar (intact and degraded alike) is estimated by One et al (2013) to about 4.7 million ha (total forest area 9.9 million ha). The proposed ER-Program uses a watershed/landscape approach, combining through adaptive management a series of direct and indirect ER activities over a period of 5 years (with a long-term vision of 10, eventually 20 years), implemented in a complex socio-cultural and ecological environment with the aim to serve as a model for a national wide ER-Program in the LULUCF and energy sector in particular. In the region, two long-lasting REDD+ VCS projects and biodiversity protection projects are implemented by WCS, CI that, according to the ERPD will be fully integrated in the ERPA. The WB, through the project PADAP and work of other partners have been doing exemplary work to address both, development and conservation.

While the document presents well the overall problems and challenges of poverty driven deforestation and forest degradation in a jurisdictional area described as globally important for biodiversity conservation, the document should clearly outline in its rationale why exactly the selected jurisdictional area is the one with the major potential to address REDD+ and to achieve lasting results.

The TAP's recommendations in its review of the first draft ERPD have been fully taken into account. The Advanced Draft ER-PD describes the rational of the choice of the jurisdictional area and explained how the existing experience of VCS projects in the area can provide valuable lessons for an up-scaled REDD+ program at a jurisdictional level.

Ind. 1.2 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]	**Yes**

Yes, the ER Program is ambitious and uses enhanced ER Program Measures to reduce emissions and enhance removals at a jurisdictional scale and reflect a variety of interventions from the national REDD+ strategy. The Advanced Draft ER-PD has well explained the rational of the choice of the jurisdictional area and the various approaches proposed to be implemented under a comprehensive REDD+ strategy. The comments and recommendations made by the TAP in its first review have thus been fully taken into account.

The TAP however reiterates its comments made in the assessment of the Draft ERPD that there might be possible shortcomings at the level of the ambition due to a number of potential legal issues in respect to the integration of the existing VCS projects in the Carbon Fund that need to be carefully addressed.

The ER Program demonstrates the ability to execute and comply with existing international laws and national legal framework. The ER Program and national legislation defines ERs as a "service/activity" able to transfer the ERs titles to the Carbon Fund. Nevertheless, in the view of the TAP, the ER Program demonstrates important limitations on some of the legal abilities to the effective negotiation/transfer and seeking of part of the ERs, as outlined beneath:

- The ER Program integrates as part of the Program two already existing REDD Projects established under the VCS – VM0007 that creates a series of legal/contractual limitations. Attached to the existence of the two projects the TAP has identified a limitation on the ability to transfer a significant part of the ERs to the Carbon Fund.
- In reality even that the ER Program Entity demonstrates that it is possible to transfer the title to the Carbon Fund by respecting the land and resource tenure rights of the potential rights-holders (70% area of Public Forest Lands and 30% area of Non Forest Lands) in the Accounting Area, there is a limitation on a significant part of the ER Program Area as result of the interpretation of Table 35: Ex Ante evaluation of the Emission reductions opportunities and potential in the MERPA – Section 13.1. - Page 206/207, in result of the % of ERs connected to the two pre-existing VCA Projects (Makira REDD+ Project - managed by the Government of Madagascar and WSC; and Ankeniheny-Zahamena Corridor (CAZ) REDD Project - managed by the Government of Madagascar and Conservation International.
- The VCS Projects have both of them pre-existing contractual agreements between the Government of Madagascar and two entities designated simultaneously as Managers and Commercial Representatives of the Government. Those entities are attributed to act as "Exclusive Commercial Representatives" of the Government of Madagascar (intermediating with exclusivity all the procedures to negotiate and sell the (VCUs/ERs) on behalf of the Government). That contractual disposition creates a limitation on the ability of the ER Program Entity to negotiate by itself the transfer of a significant part (approximately 65% of the ERs of the ER Program Area) to the Carbon Fund.

In addition, these contracts also have implications/limitations on the Benefit Sharing Agreement and the distribution of Revenues of the selling of ERs (VCUs). E.g. the contract with CI stipulates in Article 3 the obligation et engagement of Conservation International: "Cle de repartition de revenues: 50% to local populations; 20% to the management entity; 20% to the Country; 5% to CI as commercial representative; 2,5 % to Cover costs (for validation, verification, etc.)".These issues need to be clarified considering the overall benefit arrangements for the jurisdictional area.

Finally, the TAP noted that a significant part of the ERs already produced are included on a contractual agreement between the Government of Madagascar and the IBRD as Trustee of the Bio Carbon Fund stipulating contractual obligations that probably will be need to access on the potential ability to transfer the ERs to the Carbon Fund. Taking this in consideration the TAP cannot confirm the ability of the ER Program to transfer a significant part of the ERs to the Carbon Fund as they are dependent of two contractual agreements that created a set of rules establishing limitations to the ability of the ER Program entity transfer the ERs to the Carbon Fund.

Thus, the TAP recommends to carefully consider to undertake further assessments to clarify the legal context :

- To carry out immediately an in-depth legal inquiry to assure the legal consistency between the existing contractual arrangements between the GoM with the two existing, large scale REDD+ projects and the planned ER Program with the Carbon Fund. Clarity is needed on different aspects, including answering the basic question if the planned ER-Program reaches its ambition to address a significant portion of forest-related emissions and removals

- To carefully address the identified issues as they relate to the contractual arrangement with the VCS projects and the ERPA-benefit sharing mechanism and issues as they relate to the contractual arrangements of the GoM with IBRD/BioCarbon Fund.

C. 2 The Accounting Area matches a government- designated area that is of significant scale

Ind. 2.1 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]	**Yes**

Yes, the accounting area is of significant scale (10% of the national territory) and 35% of the national forest area (intact, modified and degraded natural forests). It comprises the surface of 184 communes located in 5 administrative regions of the country that are characterized by the presence of tenure management offices and to great extent by the existence of existing initiatives to which the ER-Program can actively contribute.

The area is clearly delimitated as being the central piece of the remaining humid tropical forest area of Madagascar with a high level of biodiversity and endemism of species of flora and fauna. Thus, it is an important region from the viewpoint of global importance.

The TAP would welcome some further explanation on the exact choice of the borders of the jurisdictional area (e.g. why a number of communes are not included in certain regions, and why important forest tracks with pre-existing REDD+ eligible projects, such as in Masoala are not included in the jurisdictional area.

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 Programs must account for emissions from deforestation. Emissions from forest degradation also should be accounted for where such emissions are significant.

Ind. 3.1 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 – 7.1]	**Yes**

Yes, the ER Program identifies the relevant anthropogenic sources and sinks.

The country has reported a key category analysis, limited to forest land included in the accounting area, to identify significant categories and pools (see page 139 of ER-PD). According to it, the country has selected three REDD+ activities: (i) reducing emissions from deforestation; (ii) reducing emissions from forest degradation; and (iii) enhancing forest C stocks, although the latter is limited to afforestation of non-forest land.

Sustainably managing forests has not been included in the analysis, so that conclusions cannot be drawn on its significance. However, there is no evidence that in forest sustainably managed the C stock is decreasing at a scale that would classify the category as key. Furthermore, sustainably managed forests are expected to not decrease their long term C stock since across cultural cycles harvesting cannot be larger than increment.

Nonetheless, considering that GHG estimates included in this analysis do not include the lagged effect of activities, as it would be in a GHG inventory key category analysis, the TAP suggests to recalculate the GHG estimates of the activities implementing the following guidance:

- For each C pool for both activities, degradation and enhancement, the C stock change to be used should be the total net C stock change between the long term average C stock of the forest type/class before degradation/enhancement and the long term average C stock of the forest type/class after degradation/enhancement

- For deforestation, SOC changes to be used should be the total net C stock change between the long term average C stock of the forest type/class before deforestation and the long term average C stock of the forest type/class after deforestation

Ind. 3.2 The ER Program accounts for emissions from deforestation. **[**Description of Sources and Sinks selected – 7.1]	**Yes**

Yes, the ER Program accounts for emissions from deforestation.

In the Advanced Draft ER-PD, deforestation is defined as a permanent or temporary loss of 1 ha of forest cover (i.e. land cover approach). Similarly, enhancement of C stocks is defined as a permanent or temporary gain of 1 ha of forest cover.

According to IPCC methods, deforestation is a change in the land use from forest to any other use, so that temporary losses of forest cover do not qualify as deforestation. However, considering that temporary increases in forest cover are deliberately accounted for under the activity Enhancement of C stock such deviation from IPCC methods is expected not significantly impact the total quantity accounted for under the two activities.

Consequently, deforestation would be identified by visual interpretation of an area of 1 ha of images of high and very high resolution (Google Earth dataset) as a decrease in tree cover below the 30% threshold. An increase of tree cover above 30% would be classified as "afforestation" (either to secondary forest or to agroforestry).

The TAP further notes that although forest plantations are classified as forest, the permanent or temporary cover loss of forest plantations is not classified as deforestation; similarly, temporary or permanent cover gain to forest plantation is not classified as afforestation. In the TAP's understanding this would mean that forest plantations are not part of any of the elected activities.

Ind. 3.3 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). **[**Description of Sources and Sinks selected – 7.1]	**Yes**

Yes, in the Advanced Draft ER-PD, emissions from forest degradation are accounted for.

Forest degradation is defined as a long-term reduction of forest carbon stocks due to anthropogenic disturbances resulting from canopy loss, not qualified as deforestation (page 145). Forest degradation (table 16) represents the transition from a primary forest (dense forest with no signs of disturbance) to a disturbed forest (dense forest with signs of disturbance or located close, <100 meters, to deforested areas) or to agroforestry (mainly plantations of clove or other fruit trees) and the transition of disturbed forest to agroforestry. Transitions from secondary forest (open forest that results from regrowth after deforestation) to agroforestry is not counted as degradation since C stocks of agroforestry are higher. As noted for deforestation any conversion of a disturbed forest, or a secondary forest or an agroforestry area to forest plantation is reported as deforestation.

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.

Ind. 4.1 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). [Description of Carbon Pools and greenhouse gases selected – 7.2]	**Yes**

Yes, the ER Program accounts for all carbon pools and GHG.

For all activities, the country has selected to account for C stock changes (and associated GHG emissions and removals) from:

- Aboveground and belowground biomass
- Dead wood, although limited to standing dead trees
- Litter and SOM, although accounted for the activity reducing deforestation only

All GHG (CO_2 N_2O and CH_4) from those C pools will be accounted for; although N_2O and CH_4 emissions for the activity reducing deforestation only.

Ind. 4.2 Carbon Pools and greenhouse gases may be excluded if: 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 II. The ER Program can demonstrate that excluding such Carbon Pools and greenhouse gases would underestimate total emission reductions. [Description of Carbon Pools and greenhouse gases selected – 7.2]	**Yes**

Yes, this indicator is met. Indeed:

- Degradation always determines a net loss in the long term C stocks of both, litter and SOM, so that their exclusion reduces the amount of emission reductions that can be accounted for;
- Afforestation always determines a net gain in the long term C stocks of both, litter and SOM, so that their exclusion reduces the amount of emission reductions that can be accounted for.

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.

Ind. 5.1 The ER Program identifies the IPCC methods used to estimate emissions and removals for Reference Level setting and Measurement, Monitoring and reporting (MMR). [Description of method used for calculating the average annual historical emissions over the Reference Period – 8.3] [Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area– 9.1]	**Yes**

Yes, the ER-PD applies methods from the 2006 IPCC Guidelines. Although according to the FCPF Carbon Fund Methodological Framework the use of Tier 1 IPCC default factors for belowground biomass seems not to be justified.

Beneath, the TAP provides a number of observations that could strengthen the methodological framework applied in the proposed ER-Program:

- A single average aboveground biomass value has been calculated for each forest class: 251.3 Mg d.m. ha^{-1} for primary forests and 170.97 Mg d.m. ha^{-1} in modified (degraded) natural forests, 85.66 Mg d.m. ha^{-1} for secondary forests and 87.87 Mg d.m. ha^{-1} in agroforestry (page 157). The aboveground biomass of secondary forest has been calculated as average value of 4 subtypes: Ravenala, Ravenala mixte, Single layer, Savoka vieux.

  Aboveground Biomass stocks include all trees with a dbh equal or larger than 5cm and all palms, as well as standing dead trees. Specific allometric equations have been calculated and applied at level of forest subcategory.

  For non-forest land a single value for average aboveground biomass stock has been calculated, i.e. 11.96 Mg d.m. ha^{-1}.

- For dead wood data are limited to standing trees labelled as dead trees, and the following average C stock values have been calculated for each forest class: 5.82 Mg C ha^{-1} for primary forests and 4.66 Mg C ha^{-1} in modified natural forests, 2.33 Mg C ha^{-1} for secondary forests and 2.40 Mg C ha^{-1} in agroforestry (page 170).For litter stock a single value of 2.1 Mg C ha^{-1} has been used, taken from table 2.2 (tropical forests) of the 2006 IPCC Guidelines.

- IPCC Default R ratios are applied, one for each forest class, to expand to belowground biomass.

- For SOM IPCC default factors have been used by applying to a single soil type (low activity clay soil), the one with most conservative SOC stock, and the land use, land management and C inputs stock change factors for crop systems with no tillage, with a fallow period shorter than 20 years, and no C inputs, although the TAP guesses that an average level of C inputs should be assumed for such tavy systems where crop residues and woody vegetation components determine an annual C input to soil.

- While the use of Tier 1 factors is justified by the insignificancy of the litter and SOM C pools, there is no evidence that the use of Tier 1 factors for belowground biomass is conservative compared with actual factors; considering that the exclusion of the belowground biomass C pool would be conservative, it is suggested in absence of country-specific data or of evidences that the use of IPCC defaults is conservative either to collect data during the project implementation period or to exclude this C pool from accounting. However, the TAP is of the opinion that this deviation is very unlikely to have significant impact on estimated GHG emissions and removals.

- Non-CO_2 emissions associated with deforestation are estimated by applying the IPCC default method and factors. The use of Tier 1 method is justified by the difficulty to collect data for the calculation of country specific factors. However, the fuel load value should be the sum of aboveground biomass and dead wood stocks and the combustion factors selected from table 2.6, volume 4, of 2006 IPCC Guidelines seem not appropriate. For primary forest the factor to be used should be that one for Primary tropical moist forests (i.e. 0.5) while for modified natural forests should be that one generic for secondary forests (i.e. 0.55). Those two inaccuracies determine an underestimate of GHG emissions in the reference level, which means that they make the reference level conservative.

- Further, the GWP applied for methane emissions should be 25, instead of 21, according to IPCC 4thAR, since the GWP applied to nitrous oxide emissions is 298. Also this inaccuracy determines an underestimate of emissions in the reference level.

- Regarding activity data the areas of forest cover change are first detected through overlapping of maps created from Landsat images by automatic classification of forest and non-forest areas; subsequently data from visual interpretation of very high resolution imagery, collected by applying a random sampling design of a size of around 1,640 points, are used to adjust the estimates. Considering that the map overlapping identify land cover changes with minimum area of 0.09 ha, while the visual interpretation has detected changes in areas of 1 ha, and that the maps have been generated without a pixel filtering process that may have caused significant biases, the TAP recommends a major methodological change, that however may conveniently be implemented during the project implementation as follows:
  - To increase the sampling size to a level to at least[1] 1 point each 1,000/500 ha,
  - To infer area and area change statistics using sampled data only.

  Such recalculation of the activity data can be done during the project implementation period, by applying a random net of plots to the jurisdictional area and collecting data on time series of land cover changes, from 2005 onward.

[1] The sample size should be defined by studying the increase in accuracy of information versus increasing size of sampling

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.

Ind. 6.1 The following methodological steps are made publicly available: I. Forest definition; II. Definition of classes of forests, (e.g., degraded forest; natural forest; plantation), if applicable; III. Choice of activity data, and pre-processing and processing methods; IV. Choice of emission factors and description of their development; V. Estimation of emissions and removals, including accounting approach; VI. Disaggregation of emissions by sources and removal by sinks; VII. Estimation of accuracy, precision, and/or confidence level, as applicable; VIII. Discussion of key uncertainties; IX. Rationale for adjusting emissions, if applicable; X. Methods and assumptions associated with adjusting emissions, if applicable. [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 & 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]	**No**
No, although data have been made available to reviewers, they are yet not all publicly available.	
Ind 6.2 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: I. Accounting Area II. Activity data (e.g., forest-cover change or transitions between forest categories) III. Emission factors IV. Average annual emissions over the Reference Period V. Adjusted emissions Any spatial data used to adjust emissions, if applicable. [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 &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]	**No**
No, at the time of this review no dataset has been made publicly available. It is reported (ERPD page 187) that data will be stored and published in a geoportal which forms an inherent element of the NFMS. The inventory portal will be developed by the World Resource Institute in cooperation with the MEEF, spearheaded by the "laboratoire de geomatique". This approach will ensure that the data is well stored while being publicly accessible.	

C.7 Sources of uncertainty are systematically identified and assessed in Reference Level setting and Measurement, Monitoring and reporting	
Ind 7.1 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. [Activity data and emission factors used for calculating the average annual historical emissions over the Reference Period 8.3] [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 12.1]	**Yes**
Yes, sources of uncertainty are systematically identified and assessed.	
Ind 7.2 The sources of uncertainty identified in Indicator 7.1 are assessed for their relative contribution to the overall uncertainty of the emissions and removals. [Identification and assessment of sources of uncertainty 12.2]	**No**
No, the sources of uncertainty are yet not fully assessed for their relative contribution to the overall uncertainty. IPCC distinguishes bias (systematic errors) from random errors (uncertainties). While the first must be removed because they do not cancel out when propagate, the second must be quantified, minimized, mainly through stratification of the population estimated, and propagated across estimates. IPCC distinguishes uncertainty in the individual, i.e. the standard deviation of a sample, and uncertainty in the mean, i.e. the standard error of a sample. The first is the uncertainty to be propagated when a parameter of a population is applied to a subset of the population, e.g. when the average stock of biomass of a forest is applied to each area deforested, while the second is applied when the parameter is applied to the entire population, i.e. deforestation area. Recalling such IPCC methodological approach, the TAP noted that the uncertainty to be used for the C stock factor values of each C pool should be their standard deviation, instead of their standard error. This implies a larger uncertainty of GHG estimates. The TAP recommends recalculating the uncertainty of GHG estimates and of the total reference level.	
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. [Activity data and emission factors used for calculating the average annual historical emissions over the Reference Period, 12.2] [Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area]	**No**
See detailed comments at 5.1 and the TAP assessment of indicator 9.2.	

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. [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 12.1]	**Yes**
See comments at 6.1 and 9.2. To further reduce uncertainties, the TAP recommended during the monitoring phase to collect biomass data to refine the calculation of the emission factors. Although there is no evidence of bias in applied factors, the collection of new data will reduce the uncertainty of emission factors and therefore of GHG estimates as Reference Level and Emission Reductions; thus enhancing the credibility of the accounting framework.	
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 12.1] [Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area 9.1]	**Yes**
However, see comments at 7.1	
Ind 9.2 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 [Quantification of uncertainty in Reference Level setting 12.2]	**No**
No, uncertainty of emissions reductions has not been estimated, although the overall uncertainty of the reference level is estimated at 25%, and the discount factor for emissions reductions has been selected at 4% according with the reference level uncertainty. The ERPD further reports that the uncertainty of emission reductions will be quantified using error propagation equations (IPCC Tier 1) as the uncertainty of the difference between the reference level and the expected actual net emission. However, according to IPCC methods the uncertainty of emissions reductions should be quantified as the uncertainty of the trend; since total GHG emissions and removals have deviated from their expected path -i.e. the reference level- due to the implemented mitigation policies.	

Ind 9.3 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. [Quantification of uncertainty in Reference Level setting 12.2]	**No**
No, estimates of uncertainty of emissions reductions have not been reported, although the discount factor associated with uncertainty has been calculated on the basis of the aggregated total uncertainty -i.e. 25%- in the reference level (see section 12.f.). However, once the emission reductions are calculated, these will be reported providing all information in a transparent way demonstrating that the principles set in Chapter 9.1 have been followed. The following information will be reported: (i) Reporting of parameters measured and monitored; (ii) Total emission reductions;(iii) Emission reductions disaggregated: (iv) REDD+ activity and sub-activity, per participant in the benefit sharing mechanism; (v) Existence of reversals.	
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	
Ind 10.1 The Reference Level is expressed in tons of carbon dioxide equivalent per year [Estimated Reference Level 8.5]	**Yes**
See table 27, page 177	
Ind 10.2 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 [Relation between the Reference Level, the development of a FREL/FRL for the UNFCCC and the country's existing or emerging greenhouse gas inventory 8.6]	**Yes**
Yes, the ER Program links to the national FRL/FREL and UNFCCC requirements. The same entity dealing with the ER-P REL is also responsible for the submission of the national FREL/FRL for REDD+ activities under the UNFCCC. Further, a new version of the FREL/FRL for REDD+ is going to be submitted by the end of the year applying the same methodology and background data that have been applied to calculate the ER-P REL. Therefore, besides the differences determined by the different nature, sub-national for the ER-P REL and national for the REDD+ FREL/FRL, and different requirements, i.e. historical period 2005-2015 for the ER-P REL and 2005-2013 for the REDD+ FREL/FRL consistency is expected in methods and background data applied. However, compared to the ER-P REL, the REDD+ FREL/FRL does not include non-CO_2 emissions and C stock changes in the dead wood pool. Further, it does not include the activity "Enhancement of C stocks".	
Ind 10.3 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 [Relation between the Reference Level, the development of a FREL/FRL for the UNFCCC and the country's existing or emerging greenhouse gas inventory 8.6]	**Yes**
Yes, the ER Program shows consistency with the country's existing or emerging greenhouse gas inventory.	

As reported on page 178 of the ER-PD, Madagascar is in the process of establishing a national forest monitoring system for REDD+ which will be spearheaded by the 'laboratoire geomatique' hosted under BNC REDD+. The laboratory will develop (i) activity data and (ii) derive emission factors. All data will be provided to the BNC CC that is the entity responsible for the preparation of the GHG inventory within the national communications and biennial update reports. This will ensure consistency among GHGI and REDD+ estimates, so far as the flow of information is ensured.

The TAP suggests in the further course of preparation to organize a workshop with the personnel responsible for the compilation of the national GHGI and, if resources are available, to assign to the BNC REDD+ the responsibility of the compilation of the land use sector component of the GHGI.

C 11 A Reference Period is defined

Ind 11.1 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 [Reference Period 8.1]	**Yes**

Yes, the Reference Period is duly defined.

Activity data have been taken for the period 2005-2015 (10 years) using the land cover and land cover change maps after correction with sampling data.

Ind 11.2 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. [Reference Period 8.1]	**Yes**

Yes, the historical reference period starts in 2005 and ends in 2015(2005-2015, 10 years)

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. [Forest definition used in the construction of the Reference Level 8.2]	**Yes**

Yes, the definition of forest used in the construction of the Reference Level is specified.

The forest definition applied is based on size (minimum height 5 m) and density (minimum cover 30%) of cover elements (trees) across a land (minimum area 1 ha). This implies that the definition is a pure land cover type definition, with the exception of temporarily unstocked areas in *Eucalyptus robusta* (coppice) plantations (that are not counted as deforested).

Forest areas subject to slash and burning (Tavy system) are counted as deforested at first cover loss although that in many cases, tree vegetation regrows during the fallow's phases. Their subsequent regrowth to secondary forest is classified as area under enhancement of C stocks.

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.

Ind 13.1 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 [Average annual historical emissions over the Reference Period 8.6, 13.2]	**Yes**

Yes, the Reference Level does not exceed the average annual historical emissions over the Reference Period.

Regarding the contribution of deforestation to the reference level, no adjustment has been applied to the average annual historical emissions of the period 2005-2015.Regarding the contribution of enhancement of C stock to the reference level, it is noted that a reference level to measure the results of an activity aimed at enhancing C stocks is the C stock level of the land in absence of the mitigation activity, or analogously its C budget. Because enhancement of C stock activity occurs on abandoned degraded agricultural land such C budget may be conservatively assumed to be 0. This is consistent with the current treatment of afforestation under the Kyoto Protocol (i.e. gross-net accounting).

Ind 13.2 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: (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); (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. [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 8.4].	**N.A.**

The TAP rated this Indicator as "Not assessed" and the TAP provides the following comments to this assessment:

No adjustment has been applied (See 13.1.)

Because new drivers of deforestation are impetuously growing over the past years within the jurisdictional area, e.g. widespread mining, including the sapphire rush in the Ankeniheny-Zahamena Corridor, and because the increasing pressure of migration from south to north of Madagascar* and considering that the reference level is the counterfactual in absence of the planned project activities, the TAP presumes that an adjustment of the reference level could be justified and that a 10-year reference period as close as possible to the submission date of the ER-PD would better reflect the counterfactual level of emissions and removals.

*See https://www.iom.int/sites/default/files/country/docs/Madagascar/IOM-Madagascar-Southern-Madagascar-Assessment-Report-EN.pdf	
Ind 13.3 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: i. The basis for adjustments is not documented; or ii. Adjustments are not quantifiable. [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 8.4]	**N.A.**
See 13.1. No adjustment has been applied.	
Ind 13.4 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 8.4]	**N.A.**
See 13.1. No adjustment has been applied.	
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	
Ind 14.1 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 9.1]	**Yes**
Yes, same method as applied for REL will be applied. Same considerations apply too.	
Ind14.2 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 [Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area 9.1]	**Yes**
Yes, activity data on deforestation, forest degradation and afforestation will be collected at biennial pace	

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 [Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area 9.1]	**Yes**
Yes, Emission factors or the methods to determine them are the same for Reference Level setting and for Monitoring, or are demonstrably equivalent. However, the TAP recommends, in order to enhancing accuracy of accounted emissions reductions, to collect additional data on forest C stocks and to recalculate accordingly the reference level at the final accounting.	
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 9.3]	**Yes**
Yes, the Forest Monitoring System (FMS) of the ER-Program will be fully integrated in the National Forest Monitoring System (NFMS) that was established in accordance to the decision 4/CP.15. The NFMS has two main functions: (i) a monitoring function and (ii) a Measurement, Verification Reporting and Verification (MRV) function. The NFMS is based on remotely sensed data collection and analysis, performed by the Laboratoire geomatique (same as for FMS) and by ground data collection from the national forest inventory, which is contrast not part of the FMS. The TAP further notes that the same system will provide information for the preparation of the national GHGI, so ensuring full consistency in datasets and methods.	
C 16 Community participation in monitoring and reporting is encouraged and used where appropriate	
Ind 16.1 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 [Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area 9.1, 9.2]	**No**
No, the ER Program does yet not fully explore opportunities for community participation in monitoring and reporting. Although the TAP recognizes that local communities and REDD+ projects may provide information on performance, illegal logging activities, loss events, poaching and irregularities on the REDD benefit sharing process, community monitoring activities are not foreseen. However, it is foreseen in the REDD+ activities under the UNFCCC where community monitoring will be based on smart phones which are linked to a national geoportal of the NFMS (First field tests of community monitoring were conducted, and the geoportal is being developed in cooperation with Global Forest Watch). Further, also the VCS REDD+ projects insisting in the jurisdictional area did involve local communities in activities of surveillance. Thus, the TAP recommends to build on ongoing experiences in community participation to monitoring of REDD+ projects in the jurisdictional area (including COBAs), by first identifying surveillance activities assigned to the local communities that have been proven effective, second to identify additional elements that may make them more	

effective, if any, third scale them up to the entire jurisdictional area.

C 17 The ER Program is designed and implemented to prevent and minimize potential displacement

Ind 17.1 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. [Identification of risk of Displacement 10.1]	**Yes**

Yes, deforestation and degradation drivers that may impact the ER Program are identified and displacement risks assessed.

A complete assessment of drivers and associated risks of displacement of emissions has been provided, namely: (i) annual crops and shifting cultivation; (ii) permanent crops; (iii) fires due to pastoralism; (iv) service timber harvesting and artisanal loggers; (v) wood fuel and (vi) charcoal production. The assessment identifies all possible activities shifting from the area subject to the project to external areas, and associated impacts on markets. Arguments provided are based on robust logic. A main feature to avoid potential displacement is the implementation of mitigation actions within watersheds, since movements of population across watersheds is unlike because of traditional ownership of lands by different communities.

Finally, it assesses the risk of decreasing C stocks in tavy (shifting cultivation) areas associated with an intensification of their exploitation (i.e. no or shorter fallow phase), that is addressed by the promotion of agroforestry in those areas.

Further, although the risk of displacement associated with the need of fuelwood and charcoal is going to be addressed through the establishment of new plantations, the TAP questions that there might be a significant shifting during the accounting period of fuelwood and charcoal production from the jurisdictional area to the neighbouring forested areas because of the time needed to plant (fuelwood) trees and to allow their growth till harvesting's time. To mitigate such risk, the TAP suggests to carefully reflecting on the need to include the important natural forest massif of the Masoala region within the jurisdictional area.

Finally, the TAP suggests using the recently launched programme of Madagascar Forest Watch of the World Resource Institute to monitor increases in deforestation and forest degradation in neighbouring forest areas to inform and guide the implementation of the activities identified to minimize the risk of displacement.

Ind 17.2 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. [ER Program design features to prevent and minimize potential Displacement 10.2]	**Yes**

Yes, the ER Program has in place an effective strategy to mitigate and/or minimize, to the extent possible, potential displacement.

Classified according to the driver, remedial actions have been identified for each shifting activity, as: enhancement of agriculture productivity to deal with drivers (i) annual crops and shifting cultivation); (ii) permanent crops; and (iii) fires due to pastoralism; improving forest management to deal with driver (iv) service timber harvesting and artisanal loggers; and reforestation and rehabilitation of forests to deal with drivers (v) wood fuel and (vi) charcoal production; as well as improve efficiency of charcoal production and its use (efficient cookstoves).

In addition, benefits, as additional income, generated by ecosystem services should minimize population transfers

(and associated displacement of emissions) outside the boundaries of the project activities.	
Ind 17.3 By the time of verification, the ER Program has implemented its strategy to mitigate and/or minimize potential Displacement	**N.A**
Only applicable at the time of verification.	
Ind 17.4 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	**N.A**
Only applicable at the time of verification.	
C 18 The ER Program is designed and implemented to prevent and minimize the risk of reversals and address the long-term sustainability of ERs	
Ind 18.1 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]	**Yes**
Yes, the assessment of risks of reversals has been conducted following the FCPF Buffer Guidelines. Four main risk factors are described: (i) Lack of broad and sustained stakeholder support; (ii) Lack of institutional capacities and/or ineffective vertical/cross sectorial coordination; (iii) Lack of long term effectiveness in addressing underlying drivers; and (iv) Exposure and vulnerability to natural disturbances. After the end of the ERPA, risks of reversal will be equivalent to those during the ERPA's Term.	
Ind 18.2 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]	**Yes**
Yes, risks of Reversals are assessed to the extent possible during and beyond the term of the ERPA. The lack of broad and sustained stakeholder support is considered low since communities have been involved in the design phase of the program (based on information received at the country mission); a number of communes and communities have already experienced and appreciated the benefits of implementation of REDD+ activities of existing VCS projects. The TAP acknowledges thus such assessment. The lack of institutional capacities and/or ineffective vertical/cross sectorial coordination is considered medium since there's a lack of institutional capacities at central and regional level to ensure that activities and project could be implemented, coordinated, and efficient. Mitigation measures as declared to be implemented are: (i) structuration of BRC REDD+ in regions and capacity building for their coordination role; and (ii) developing partnerships with other ministries and identifying technical and financial support to increase their knowledge, capacities and involvement into REDD+. The lack of long term effectiveness in addressing underlying drivers is considered low since a number of actions are aimed at improving agricultural practices and access to market in order to increase productivity and at the same time	

increase revenues of local population. Both benefits are expected to be pursed also beyond the Term of the ERPA. In particular, the project focuses on transformation of slash-and-burning, tavy, system in agroforestry systems so ensuring a higher average long term C stock. Further, the identification and promotion of "no-land" activities, income-generating activities that are not dependent on land ownership, will limit the pressure on lands so ensuring that their sustainable use is not opposed by the pressure of people under subsistence needs.

However, carbon rights remain unaddressed i.e. no law, policy or regulation in Madagascar defines them and the mitigation measures proposed in the ER-PD are vague. The TAP's view is that the absence of a legal framework that univocally addresses carbon rights poses medium reversal risks; the TAP thus recommends that reported figures in the ER-PD should be revised accordingly.

Exposure and vulnerability to natural disturbances: Considering that natural disturbances causes just temporary loss of C that are followed by forest regrowth if no human activities determine a change in land use, and that such human-driven risks of reversal are already been addressed within previous factors, this risk should be considered zero. Consequently, the review is of the view that the risk of exposure and vulnerability to natural disturbances should be revised accordingly to 0%.

After the end of the ERPA any reversal will be monitored and reported by the NFMS for REDD+ activities within the National inventory report to be submitted under the Paris Agreement and accordingly accounted for. Thus, in the TAP's view, no risk of permanence needs to be materialized beyond the Term of the ERPA.

C 19 The ER Program accounts for Reversals from ERs that have been transferred to the Carbon Fund during the Term of the ERPA

Ind 19.1 During the Term of the ERPA, the ER Program accounts for Reversals from ERs using one of the following options: ▪ 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 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. ▪ 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 [Reversal management mechanism, Selection of Reversal management mechanism 12.3]	**Yes**

Yes, during the Term of the ERPA, the ER Program accounts for Reversals from ERs.

Madagascar has selected option 2

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

Ind 20.1 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	**N.A.**

Only applicable before the end of the ERPA term.	
Ind 20.2 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	**N.A.**
Only applicable before the end of the ERPA term.	
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	
Ind 21.1 The ER Program Monitoring Plan and Monitoring system are technically capable of identifying Reversals [Monitoring and reporting of major emissions that could lead to Reversals of ERs 11.4]	**Yes**
Yes, the ER Program Monitoring Plan and Monitoring system are technically capable of identifying Reversals. The monitoring of tree cover change will be active during the ERPA Term and also beyond since the jurisdictional area will remain subject to the NFMS of national REDD+ activities as well as of the GHGI under the Paris Agreement. This will ensure that reversal will be identified when they actually occur and also that they will be accounted for accordingly.	
Ind 21.2. 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.	**N.A.**
Only applicable at the time a reversal occurs and at the time of verification.	
C 22 Net ERs are calculated by the following steps: 1. Subtract the reported and verified emissions and removals from the Reference Level 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. 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	

[Ex-ante estimation of the Emission Reductions 13.2]	**No**

No, as it is yet not possible for the TAP to fully assess the information.

The expected emission reductions have been calculated according to a number of sub-targets (see page 215) for which neither the geographical boundaries, to which are applied, nor the associated emission reduction calculation have been reported.

The total expected emission reduction is estimated at 12.36 million from reducing deforestation, 0.23 million from reducing degradation and at 2.02 million from enhancement of C sock in afforested areas. A total buffer of 22% (4% for uncertainties and 18% from risk of reversal) i.e. 3.22 million is estimated, although in table 30 the amount of reduction units to be allocated to the "reversals buffer" is erroneously calculated. Consequently the total expected emission reductions is estimated at 10.81 million across the five-year period, instead of the 13.93 million reported in table 30.

It is not possible for the TAP at the current stage to check the correctness of the ex-ante accounted quantities since complete information on calculation is not provided. Reported values cannot be acknowledged without a deep analysis.

The TAP therefore recommends to revise the ex-ante accounted quantities and to provide a map and an associated table where all sub-targets are geo-referred and quantified; and to ensure that the total accounted quantity expected for reducing deforestation does not exceed the associated reference level.

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 13.1]	**No**

No detailed information has been provided on the risk of double accounting.

However, portions of the jurisdictional area are included within the two VCS projects. Furthermore, Madagascar has submitted to UNFCCC a FREL under REDD+ and REDD+ activities are part of the nationally determined contribution. This means that reductions accounted for under the ER Program will also be accounted for under VCS, under REDD+ and as Madagascar contribution to mitigation of climate change under the Paris Agreement. Also, the TAP has been informed on a forthcoming GCF project that partly overlies with the jurisdictional area.

In annex 1 of this report, the TAP provides some methodological guidance to address multiple accounting.

[Data management and Registry systems to avoid multiple claims to ERs 18.2]	**No**

It is reported that BNC REDD+ will be responsible for the management of a national REDD+ Registry, which will be developed until the end 2018. Currently the World Resource Institute is developing a forest information system that will be hosted in the Geomatics Laboratory located in BNC REDD+ office. BNC CC is commencing the development of the National Carbon Registry, which it is expected to be a tracking database rather than a registry as such. The GoM is also awaiting the development of the Carbon Fund registry to take a decision on whether to maintain a national ER transaction registry.

This means that neither the requisites of the DataBase (see comments on Indicators 37 and 38 below) neither a ERs Transaction Registry is defined/created. Also, the decision to manage the future ERs Transaction Registry has not been taken yet.

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. [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**

Yes, while the ERPD yet does not a complete work of explaining how the UNFCCC safeguards will be managed, additional information is available in Annex IV of the Advanced Draft ER-PD (National law and regulatory texts linked to safeguards) that clarifies the approaches. Thus, the Advanced Draft ER-PD document does a much more complete job looking at the World Bank Safeguards. Meanwhile, the SIS is designed to track both World Bank and UNFCCC safeguards. In respect to the latter, Madagascar is seeking to implement many steps that should address the UNFCCC safeguards, though these are not always directly linked to the present ER-Program.

The ER-PD lists the potential risks and negative impacts in relation the various REDD+ strategies that communities could select if they choose to apply to do a REDD+ project in their area (See section 14.1 b). These were identified through the SESA process.

There are also a number of elements of the ER-PD strategy that are clearly trying to address risks identified in the SESA process. From a decentralized decision making process that is seeking to empower the local communities undertaking REDD+ activities, to improving transparency by making an increased amount of forest and land use information available, a number of the design decisions should help address the risks identified. In addition, the ER-PD also states that the process decision makers will use to select projects brought forward by communities and especially how the World Bank safeguard plans will be considered to ensure that the necessary safeguard procedures are applied, e.g. if a project limits individual's access to natural resources, which would trigger the resettlement plan.

The Advanced Draft ER-PD describes the specific mitigation measures to the various risks identified in the SESA (pages 220-225), so that it is possible to know how these risks have been addressed through the design of REDD+ activities and/or what additional risk mitigation measures will be taken. Some of the risks are addressed in more detail in the supporting safeguard documents; however, some topics, such as elite capture of the benefits and corruption are less clearly addressed. Even where transparency exists, without any consequences for the actions taken, there may still be problematic practices.

The TAP recommends further developing on the social safeguard issues, particularly in respect to the potential risks at local level, including elite capture in benefit sharing and corruptive behavior.

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]	**No**

No, at the moment second TAP review, the safeguards plans that address social and environmental issues had not yet been publicly disclosed in a manner and language appropriate for the affected stakeholders that we are aware, though steps to do some appear to be imminent.

Madagascar has completed the SESA process in support of the development of the National REDD plan. The SESA process is described as being highly participatory. 64 people were involved in the analysis of the major issues around REDD+. 36% were women. Outreach to local communities surveyed about 847 people "at the village and commune levels." Further regional workshops were undertaken to discuss REDD+ strategic options. 526 people were convened.

Following the SESA it was determined that an Environmental and Social Management Framework (ESMF), a Population Resettlement Policy Framework (PRPF) and a Functional Framework (FF) should be prepared. These documents have been prepared and submitted to the World Bank. They are quite detailed on questions of resettlement and compensation when there is a loss of access to natural resources, measures to be applied when especially vulnerable communities are impacted, and the steps that will be taken during the selection and implementation of the project to ensure the policies are respected and to mitigate risks. These include: (i) the selection of REDD+ activities that will be implemented by communities and decentralized decision making structures, (ii) the criteria that will be used to select projects, (iii) capacity building and education to communities, (iv) the establishment of a grievance mechanism, etc. Nevertheless, as the risk exists and it is not yet known the extent which communities might be resettled or lose access to resources the government will set aside $200,000 to prepare for such eventualities. A budget of $1,641,000 US dollars has been identified for the broader ESMF implementation.

The TAP recommends that further stakeholder consultations been undertaken once the WB safeguard plans have been fully reviewed. At this time the World Bank safeguard plans are still in a reviewing process, and have not yet been discussed or disseminated to all affected stakeholders. This is a step that needs to be addressed in a manner that will allow communities to understand the impact of the decisions made in this document, for example the differences in compensation if an actor has a title or customary rights to land or resources, versus if they do not.

The TAP further recommends that in the further analysis and consultation process the multiples OSC are integrated, including the "Réseau genre, SIMIRALENTA, Observatoires des jeunes, Gender Links, Rohy, CCOC, AVG, le Conseil National des Femmes" among others.

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. [Description of arrangements to provide information on safeguards during ER Program implementation 14.2 and 5.1]	**Yes**

Yes, 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+.

The SIS program has been developed with principles that consolidate the UNFCCC, World Bank and REDD SES principles and safeguards. The criteria interpret these principles using Madagascar context and institutions. The indicators appear to cover the majority concerns and risks flagged in the SESA process. While it remains to be seen how manageable the data collection process will be, there seems to be both delegation of data collection and capacity building mechanisms in place, as well as verification procedures at different levels.

Also, the TAP notes that the ER-PD proposes to employ an independent observer for REDD+ activities, whose role will be to provide an independent perspective on what is occurring and to gather information in relation to the REDD+ safeguards.

Ind 25.2 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.	**N.A.**

Only applicable at the time of verification.

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

Ind 26.1 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 14.3]	**Yes**

Yes, the Feedback and Grievance Redress Mechanism has been assessed.

There has been extensive work done on the FGRM, including an assessment of the existing institutions and their legitimacy in addressing the types of grievances that are likely to arise as part of the REDD+ project done reaching out to more than 500 people in the ER-PD communities.

The assessment identified some gaps in the existing institutions. Addressing these has been written up in a separate document; it includes steps to build community awareness of the grievance mechanisms available to them with the help of local NGOs, as well as to build the capacity of local bodies to address REDD+ specific grievances.

The TAP recommends reflecting further on information sharing and awareness rising in regard to FGRM. The assessment has been posted on the BNC REDD website, however making public the information on the website does not mean that it really has reached the involved stakeholders (as at local level internet access is still restricted in Madagascar). Relevant observations from these assessments should be included in the capacity building and awareness raising activities that are planned over the coming months.

Ind 26.2 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 14.3**]**	**Yes**
Yes, there is an extensive description for how grievances could be received, move through different existing bodies in a timely manner and when a grievance is considered resolved. The ER-PD includes principles to guide the development of the FGRM, including transparency and confidentiality, impartiality and jurisdiction. At a more practical level they have also defined how an appeal procedure could work, what resolution would look like, and how each step of the system will be monitored and tracked. Information about the number of grievances received and how there were addressed will be included in the SIS system. Beyond the information in the ER-PD, information about the grievance mechanism and how it will be implemented is included in a number of the safeguard policy documents, such as the Resettlement policy. As noted above, the ER-PD team has identified the next steps will be to build the capacity of the institutions on the REDD+ question specifically and disseminate information about the REDD+ communities that may be impacted by REDD+ projects. The TAP observes that some of the language used around sensitive and non-sensitive grievances may give the impression that some grievances that are not seen as important to the achievement of REDD+ will be deprioritized. Thus, the TAP recommends to carefully review the relevant sections and to present them somehow differently.	
Ind 26.3 If found necessary in the assessment mentioned in Indicator 26.1, a plan is developed to improve the FGRM [Description of the Feedback and Grievance Redress Mechanism (FGRM) in place and possible actions to improve it 14.3]	**Yes**
Yes, there is a plan in place to address a number of the gaps related to the existing grievance mechanisms. The plan includes both capacity building activities across all institutions that have been identified as part of the grievance mechanism for REDD+, identifying the appropriate procedures etc., and putting in place and independent REDD+/safeguard observer.	
C 27 The ER Program describes how the ER Program addresses key drivers of deforestation and degradation	
Ind 27.1 The ER Program identifies the key drivers of deforestation and degradation, and potentially opportunities for forest enhancement **[**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]	**Yes**
Yes, the ERPD identifies the key drivers of deforestation and degradation as well as the potential for forest enhancement through reforestation, agroforestry and forest restoration. The intersectorial analysis of the causes of deforestation made in the ER-PD noticeably identified the dynamic of actors involved in the various key areas of REDD+. The drivers are well identified and the linkages between the direct and indirect factors are presented. In the TAP's view, a stronger distinction could be given between the factors and underlying causes of DD in the different ecosystems of Madagascar (as it should be outlined in the national REDD+	

strategy) and the specifics of the ER-Program area, as the latter is particular for the humid tropical area and not representative for the entire country.

The ER-PD document uses as an analytical basis the framework of Geist & Lambin (2001), which is useful in order to be complete in the analysis. There was a good attempt to describe, for each of the proximate causes the specifics as they occur in the proposed ER-Program area. The TAP would find it appropriate to find a table in the summary that should the key drivers of DD and the potential for forest enhancement for each of the 5 regions in the ER-Program area, as it is proposed that each region would have its own REDD+ strategy/action plan. However, the TAP recognizes the issues in this regard as summarized in the box on page 65 of the Advanced Draft-ERPD.

Figure 9 on page 66 could have been made more specific for the ER-Program area, as it stands now it is more a general summary for a variety of situations.

The draft ERPD also shortly describes in chapter 4.1 c the existing policies and activities already in place that contribute to forest conservation and forest carbon stocks in the ER-Program area. This could be completed by a more accurate presentation of PADAP, and other projects, e.g. CASEF, KfW reforestation project in Sofia that also could potentially contribute to investments supporting future carbon results-based payments.

In the section on Reference Levels (Section 8) the ERPD has provided recent estimates on deforestation and forest degradation levels; this provides critical baseline information on areas which will need vigilant monitoring. A short analysis of DD-drivers with a spatial overview of their importance over the 5 regions in the jurisdictional area could be useful.

To improve section 4.1 further, the TAP recommends:

- Complement the institutional environment in the jurisdictional area to eventually identify additional funding partners for policy and investment activities accompanying the ER activities (CASEF, KfW, WWF, Helvetas, others….)
- Make, as far as possible, a distinctive analysis for the 5 regions within the jurisdictional area, as each region is specific (e.g. % of primary forests, and protected areas; hot-spot deforestation areas, etc.) and will be covered in future with a specific regional REDD+ strategy and implementation plan. Figure 9 on page 66 could have been made more specific for the ER-Program area, as it stands now it is more a general summary for a variety of situations. There are good analysis available for the preparation of the projects like PADAP, CASEF, MBG, etc. as recommended in §3 of the text under 4.1.
- Deepen (e.g. by using information from Makira, the PADAP project document and CASEF baseline) the analysis on cash crops (cloves, ginger, vanilla, coffee, cacao, ylang-ylang and other plans with essential oils) that seem to take an important development in certain parts of the jurisdictional area, including implication of multinational private sector companies. This development can be both, an opportunity (e.g. in buffer zones to intact forests and protected areas) and a risk for the ER-Program. The risks are associated inter alia to traditional extraction methods (using firewood and charcoal in excess) to harvest essential oils (cloves in particular) and the extension of agroforestry crops in primary and moderately degraded natural forests.
- In the knowledge of the TAP, a considerable part of agroforestry plantations in the jurisdictional area are overaged and thus do not produce anymore the quantity and quality expected. This situation leads farmers to cut new areas for planting and potentially lead to gradual degradation of forest areas. It would be worth to consider such issues in the activity planning in the ER-Program.

Ind 27.2 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 [Description and justification of the planned actions and interventions under the ER Program that will lead to emission reductions and/or removals 4.3] [Institutional and implementation arrangements 6.1]	**Yes**

Yes, the ER Program identifies currently planned ER Program Measures and how they address the key drivers identified in Indicator 27.1, but further improvement should be done to support a future smooth implementation of the ER-Program.

It contains however a comprehensive presentation of the measures and approaches to address key drivers and opportunities is presented in the ERPD and the proposed institutional arrangements have been clearly described. In the view of the TAP, however, the institutional arrangements at the regional level need further clarification and eventually simplification.

In respect to the *analysis of the measures and approaches to address key drivers and opportunities*, the TAP recommends to strengthen the text by providing more concrete examples, identify clearly those who are in charge of implementation, the beneficiaries and clarify the expected results.

The measures proposed for the ER-Program area should be evidently articulated with the National REDD+ strategy. The overall approach which aims at creating a 'green development circle' is based on a multi-sectorial strategy that combines sectorial activities and enabling activities; a program that incentivizes agents towards performance; and an innovative financing framework.

The TAP noted that the ERPD underlines that flexibility and adaptive approaches are needed to address a large variety of possible intervention at landscape level, implemented at different scales: "large scale projects" implemented over e.g. several regions and covering watersheds of at least 100,000 ha in size; intercommunal, "landscape projects"; and locally based "commune-level projects". The TAP further noted that, considering such complex implementation structure, overall, the linkages between the sectorial activities (relevant to agriculture, energy, forest management and conservation), their corresponding enabling activities and the overall enabling activities relevant to governance, demography, land-use planning and land tenure are clearly established and summarized in Table 5 (page 78).

A vision and approach for the development of the ER-Program is presented, using a "landscape" approach, defining it through a general framework of zoning a watershed (from zone 1, "ridge zone" to zone 4, "low-lying land". Within this zoning, a variety of transformative ER-Program activities is proposed, with emphasis on REDD+ activities in zone 1 and zone 2 ("mid-slope"). Categories of activities are proposed, with direct and indirect impacts, including agricultural sector, forest sector, energy sector and crosscutting and "other sectors", including biodiversity conservation, environmental services, sustainable mining, decentralization and legal framework. Each category is described, with a descriptive part, location (within the zoning of watershed, not by region), expected results after 5 years, beneficiaries and an attempt to identify (in such early stage) potential agents and partners.

In the view of the TAP, the approach used is adequate and allows a clear assessment of the proposed activities. However, the descriptive part remains in general rather general.

In regards to the *analysis of the measures and approaches to address key drivers and opportunities*, the TAP recommends:

- To strengthen the analysis through the identification of more concrete activities that are suitable and adaptable to each of the regions proposed.
- To formulate the expected results in a way that they remain realistic for the proposed time frame of 5 years. Longer term ER-Program measures should be clearly identified.

In the view of the TAP, the overall *institutional arrangement* (chapter 6.1) at decentralized level is adequate, though complex with multilevel institutions and entities, decision making processes that are not yet fully described. Some of the arrangements are not yet functional and only exist on paper.

Governance, planning and decision-making at the national, regional and local levels are described (with the supreme body of the REDD+ Steering Committee (COPIL REDD+), the operational body of National REDD+ platform (PFN REDD+) and the national coordination office daily with the daily management of the future ER-Program (BNC REDD+).

Corresponding structures are being created at regional level (Figure 8). Also an independent observatory for safeguards is planned. At commune level, existing local consultative structures (SLC) chaired by the Mayor) are used.

In the TAP's view, particularly at regional level, the institutional arrangements are complex with multiplicity of existing structures with the regional platforms and the inter-communal platforms. The TAP questions if intercommunal platforms could be integrated in regional platforms.

In its internal discussions and exchanges with development partners at the TAP mission to Madagascar, the TAP notes the following and brings it to the attention of the ER-PD team :

Les rôles des structures devraient refléter le changement de paradigme que demande la REDD+ : les acteurs de terrain doivent changer de vie et d'activités et la REDD+ doit les accompagner dans ce changement (investissement et incitations) et les compenser pour cela (paiement). La population n'est pas seulement bénéficiaire de fonds pour des (petits) projets socio - économiques, elle doit être en mesure de financer des projets de vie sur base de performance dans la réduction de la déforestation. Le montage actuel est toujours conceptualisé comme pour les projets pilotes.

Les organisations de producteurs, les COBA et les communes doivent être les maitres d'ouvrage de leur projet : le paiement, la passation de marché, le suivi et contrôle et la validation des activités doivent-être de leur ressort. Le FDL (un basket-fund de gestion des subventions d'investissement au niveau des communes), suppose d'ailleurs d'avoir cette maitrise d'ouvrage communale. Les compétences des communes seront renforcées dès 2017 grâce à une assistance technique du projet PAPSP de la Banque Mondiale. Cela pourrait être compté comme investissements dans la gestion du fonds de l'ER-Programme.

Demander aux acteurs de la REDD+ d'inscrire leur projet dans une stratégie REDD+ régionale ne sera faisable avant longtemps. D'autant plus qu'il y aura plusieurs documents de référence au niveau régional: schéma régional d'aménagement, plan régional de développement (déclinaison du plan national), etc. Le TAP se demande si il n'y a pas une possibilité d'intégrer les priorités REDD+ dans les plans de références régionales (at least at a pilot level).

At the bottom level, linkages between the ER-Program entity with the supporting technical partners and state agencies are clearly shown, as well as with the agents that have the direct responsibility to reduce emissions and increase uptake (e.g. promotors of the different scale projects, such as private companies, cooperatives, conservation and social NGOs, state forestry agency, COBAs, etc.). Responsibilities pertaining to ER-activities and monitoring performance indicators are also emphasized. A well-presented overview on the local institutions provides clarity on their expected functions, e.g. for MRV activities (figure 17 page 132 and figure 205, financial flow within the ER-P for carbon revenue sharing).

In respect to the ER-Program budget, the TAP notes the explanation given in the ER-PD under chapter 6.2 explaining the difficulties at the present stage to truthfully estimate the overall budget of the ER-Program. The TAP also takes note that the summarized budget in Annex II will need to be revised in a later stage.

The TAP recognizes the effort made to clarify the institutional setting, and to precise the role of the regional level. Figure11 (page 120) demonstrates the role of regional level to translate the national strategy into regional priorities, taking into account the specificities of the concerned region. This clearly shows the willingness to divert responsibility to the regional level and give it the possibility to prioritize its activities without losing the national approach. Having noted the complex institutional framework, the TAP emphasizes that the question of capacities (human, technical, organizational) is key for the various institutions to work.

While the TAP recognizes the effort in regards to the institutional set-up, the TAP further recommends:

(i) To reflect on the role of the National REDD+ Platform (which per definition is dealing with national issues) that will have the complex task to decide on project funding, some of them with large budget requirements, designated to one specific jurisdictional area. This can create complexity in decision-making and political pressure and need careful planning and chairing. In the TAP's view, there can be conflict of interests in the REDD+ Platform as certain members are beneficiary of the ERPA (e.g. CI and WCS) and others can have a role of executing agency (e.g. PADAP and CASEF beyond others). This issue needs to be addressed.

(ii) The BNC-REDD+ and the corresponding regional REDD+ coordination office (BRC REDD+) to consider the risks associated to the overall institutional set-up as there is a clear link between their capacities, effectiveness/sustainability and the delivery of reduces emissions and increase uptake; thus, the question of creating capacities to implement projects (beyond the already existing structures) is key for success.

(iii) To reflect on simplifying the institutional setting at regional level, and emphasize on the role of regional and communal institutions (see also above text in French).

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: 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**

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

This is done in the sections:

- 2.1 Current Status of the Readiness Package and Summary (by assessing the MADAGASCAR progress in achieving the different facets of REDD+ Readiness; (Page 29 of the ER-PD)
- 4.4 Assessment of land and Resource Tenure in the Accounting Area (by giving an overview of the forest and land tenure in Madagascar, especially on the ER Program Area (page 90) describing the legal approach on the Principle of Public Ownership versus the recognizing of the individual rights to property (Article 34 of the Constitution 2010 versus Article 38 of the Governing Land Status (#2005-019) and Act of Legal Provisions applicable to private non-titled land ownership (#2006-031).
- 4.5 – Analysis of Laws, Statutes and Other Regulatory Frameworks (by describing the different legal Acts applicable to Governing Land Status; Non Titled Land Ownership ; Private Domain of the State Decentralized Jurisdictions and Legal Entities under Public Law; Forestry Law ; Local Management Natural Renewable Resources ("GELOSE") and others;
- 17.2 – Transfer of Emission Reductions Certificates (by stating that in the Project zone doesn't exist "private forests or forests delegated to decentralized government entities (CTD). In this case it will be important

nevertheless that the country clarifies the potential risks on the titulation and management of the Protected Areas and especially the potential risk of the 30% of the program zone of Non Forest Land where will apply the rules of the private law. (Especial attention to the uncertainty existing on article 38 of Act #2005-019 and article 10 of the 2014 Law on the *titulation* of the public, communities and private lands.

In the view of the TAP, the ER-Program demonstrates that the additional assessment has been conducted in a consultative, transparent and participatory manner, reflecting also the inputs from relevant stakeholders.

Ind 28.2 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. [Assessment of land and resource tenure in the Accounting Area 4.4] [Description and justification of the planned actions and interventions under the ER Program that will lead to emission reductions and/or removals 4.3]	**Yes**

Yes, 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).

The ER Program doesn't involve activities that are contingent on establishing legally recognized rights to lands and territories of Indigenous Peoples, because the notion of "Indigenous People" is not a term used in Madagascar (and thus in the ER-Program area).

The ER-Program is characterized by traditionally owned or customarily used or occupied land areas, and addresses the issue on the relevant Safeguards Plan and has a legal set of Framework already existing to address those issues, including the inclusion of actions that encourages and contribute to progress towards clarifying land and resource tenure in the Accounting Area. (see Section 4.4 and 17.2) pages 90 of ER-PD (Section 4.4 a) Overview of forest and land tenure in Madagascar) pages 97,98 of ERPD (Section 4.4 c – Description of Land Rights in the ER area) and page 248.

Ind 28.3 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 [Transfer of Title to ERs 17.2]	**Yes**

Yes, 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.

This is done by describing the nature of the entities exiting on the ER Program Area, 70% of Public forests (Protected Areas) and 30% of Non-Forest-Land – Section 17.2 – Page 248 of the ER-PD.

The ER Program clarifies that the Land and Resource regime assessment allows to the transfer of the Public Lands carbon/ERs title transfer by defining them as an activity "environmental service". (Section 17.2 – pages 248 and 249), and also Section 4.4 b) Carbon Rights (pages 95 to 98 of the ER-PD) and separating the Forest Management activities (GELOSE) from the ERs title. Also the ER-Program separates the ERs Title and transfer structure from the Benefit Sharing Mechanism suggesting Contractual Mechanisms to address the Benefit Sharing Mechanism future structure (attached to GELOSE and PADAP instruments).

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]	**Yes**

Yes, the ER Program provides a description of benefit-sharing arrangements.

The TAP notes that while a full description of the benefit-sharing arrangements is not yet completed, but recognizes that the Advanced Draft ER-PD does describe what has been done so far.

The TAP further notes that some important aspects of the benefit sharing program have been considered, for example that communities will decide the types of REDD+ projects they would like to undertake (thereby also deciding what type of upfront goods and services they might receive as part of the project) and that goods and services will be provided as reward for having achieve emission reductions.

However, when reviewing the available documentation on benefit-sharing, the TAP is of the view that the arrangements on benefit sharing have not been fully defined yet. Also, possible benefit sharing agreements have yet not been discussed to the extent needed with the stakeholders.

According to the Advanced Draft ER-PD, discussions with stakeholders on benefit sharing that appear to remain, include

- the criteria for selecting the REDD+ projects that will be undertaken at a community level
- at a higher level, to define the share of the revenue that will stay with the government to manage the REDD+ program versus will be redistributed to communities undertaking activities.
- The type of benefit-sharing, e.g. goods and services distributed versus financial compensation.

In addition, the government is still defining how existing REDD+ VCS projects, including Makira and CAZ, which have existing benefit sharing agreements with local communities, will be integrated. This issue is important and needs to be addresses (see TAP report, Criteria 1.2)

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 Program12. 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, etc. identified in the assessments carried out under Criterion 28), and Title to ERs, among other considerations. Criteria, processes, and timelines for the distribution of Monetary and Non-Monetary Benefits.	**Yes**

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 [Description of benefit-sharing arrangements 16.2]	

The Benefit sharing plan has not entirely been defined and made available, but plans appear to be in place for this to be achieved prior to an ERPA signature.

Although the topic of benefit sharing has been discussed several times during the drafting of the ER-PD and even before (see Table 7), a specific mechanism has not been fully designed.

As noted above there is a general framework and fundamental principles for benefit-sharing in the ER-PD, which includes some information about upfront payments or provision of funding to a community to develop REDD+ programs, versus payments for performance. The principles of equity, performance, and efficiency are described at both a program and regional level scale. A distribution tool is being planned and will be managed at central level by BNC REDD+ for the overall program and at regional level by BRC REDD+ for regional projects only. The aim of these distribution tools is to provide orientation during the planning phase and to encourage rebalancing if disparities arise during a cycle of carbon revenues. Also, a number of indicators related to benefit sharing, such as the increased revenue of the community, are included in the SIS. Also there is increased clarity, though not specific detail, around how financial resources will be shared between current REDD+ programs and investments for future REDD in the document. However, it appears that the details of how it will all be implemented are still to be discussed with stakeholders and shared more broadly.

One concern for the TAP around the current discussion on benefit sharing is regarding the ability of the most vulnerable to receive benefits in a structure where (i) the entire community decides on which projects will be undertaken and (ii) on how the carbon revenues will be translated into benefits, as our understanding is there will not be any cash transfers to individuals but rather money put into community infrastructure and programs. In the TAP's view, the risk for elite capture is quite high. In addition, by providing goods and services to the community, individuals are not empowered to make their own decisions about how to use the revenues.

The main agents of deforestation are often very aware about the fact that they act illegally; they often stay outside the decision-making process (at the level of communes), they do often not participate in training and other opportunities that are offered by REDD+. Such issues need to be taken into account when designing the benefit sharing plan.

The TAP recommends that during the discussions around benefit sharing further consideration be given to potentially having differentiated benefit sharing mechanisms, which might include some direct financial compensation to individuals or families. Questions of gender should also be taken into consideration.

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	
Ind 31.1 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	**No**

[Description of stakeholder consultation process 5.1] [Summary of the process of designing the benefit-sharing arrangements 15.2]	
No, while considerable efforts have been made in the Advanced Draft ER-PD, the TAP is of the view that the Benefit-Sharing Plan is yet not disclosed in a form, manner and language understandable to the affected stakeholders of the ER Program. According to Table 7 on page 111, the topic of benefit sharing has been discussed at some level in several consultations in the past 2 years and therefore it appears that the initial framing is the result of discussions with relevant stakeholders. However, in the TAP's view, there is still need for further exchange on a more detailed level. There appears to be a continued commitment (page 257) to ensuring that a consultative, transparent and participatory process continues to be followed for the more detailed conversations around benefit sharing and during the actual identification of specific projects, with a guidance document to help guide stakeholders in the program areas (page 264). In the TAPs view, however, the additions made under sub-chapter f-Integration of existing REDD+ pilot projects (CAZ and Makira) on page 259 give more complexity to the issue. There is no clear solution proposed yet (maybe there was simply not enough of time?) on certain (new) aspects of legal nature that the TAP had already identified in its first assessment. For example: If the jurisdiction is generating additional ERs from within these project areas what will be sold to the Carbon Fund, pilot projects might receive some ERs that they will be able to market independently from the ERPA (potentially as VCUs or as Madagascar ER-Program ER's), if agreed beforehand with the GoM and according to specific procedures (that will be developed in the next weeks and months), and then registered in the national REDD+ registry. The TAP thus concludes and recommends that there is need to fully clarify the scheme of benefit sharing that relates those entities where the majority of carbon credits are designated to. Thus, a further review of this issue is needed.	
C 32 The implementation of the Benefit-Sharing Plan is transparent	
Ind 32.1 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 [15.1]	**N.A.**
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 [Description of the legal context of the benefit-sharing arrangements 15.3]	**Yes**
Yes, overall, the design and implementation of the Benefit-Sharing Plan comply with the international relevant applicable laws such has the Kyoto Protocol and the United Nations Framework Convention on Climate Change, Cancun Safeguards, and the national laws. As a specific feature there are two large-scale existing VCS REDD+ projects, which are to be integrated in the REDD+ jurisdictional area, that have very specific benefit sharing rules included in their long-term contractual arrangements with the Government of Madagascar. As outlined under criteria 2 the contracts on the two VCS projects of WCS and CI potentially have	

implications/limitations on the Benefit Sharing Agreement and the distribution of Revenues of the selling of ERs (VCUs). E.g. the contract with CI stipulates in Article 3 the obligation et engagement of Conservation International: "Cle de repartition de revenues: 50% to local populations; 20% to the management entity; 20% to the Country; 5% to CI as commercial representative; 2.5 % to cover costs (for validation, verification, etc.)". These issues need to be clarified considering the overall benefit arrangements for the jurisdictional area. According to the document negotiations should be completed by the end of 2017.

The TAP therefore recommends:

- To continue to address with urgency the implications on the benefit-sharing agreement mechanism as related to the legal/contractual obligations of the Government of Madagascar to the two pre-existing REDD VCS Projects as they are relevant for the ER-Program area
- To complete negotiations with existing REDD+ projects on issues of future benefit-sharing plans.

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 [Outline of potential Non-Carbon Benefits and identification of Priority Non-Carbon Benefits [16.1]	**Yes**

Yes, the ER-Program outlines potential Non-Carbon Benefits and identifies priority Non-Carbon Benefits at a general level; however it does yet not fully describe how the ER Program will generate such priority Non-Carbon Benefits.

The Advanced Draft ER-PDprovides a list of potential non-carbon benefits itemized in the document and how these are linked to different REDD+ programs that communities might select.

Two priority non-carbon benefits have been identified in the discussions at the national level. The monitoring linked to tracking these criteria have been identified and will be added to the SIS. The TAP expects that many of the other non-carbon benefits will also be captured in the SIS, which includes a number of indicators linked to social, governance, and environmental issues of importance to stakeholders.

Once the more detailed priorities have been identified a decision should be made on which SIS indicator can track these priorities most effectively.

Finally, the TAP further recommends to take into account more simple indicators that concern all levels (local, municipal, jurisdiction), for example water for multiple uses, like drinking water and water for agricultural activities. The measurement of this sort of indicators allows the participation of communities

Ind 34.2 Stakeholder engagement processes carried out for the ER Program design and for the readiness phase inform the identification of such priority Non-Carbon Benefits [Description of stakeholder consultation process 5.1]	**No**

Priority non-carbon benefits have been identified in discussions with stakeholders conducted at the national level and in the framework of the R-Package at regional level in the jurisdictional area.

Tailor-made discussions with regional platforms helped identify which potential non-carbon benefits would be viewed as most important. Further discussions regarding the non-carbon benefits are planned (page 268) and are a key part of a community deciding whether they would wish to put forward a REDD+ project in their area. The

programs rely on non-carbon benefits generating interest in the implementation of the activities, and therefore will be a fundamental aspect of the way programs are designed and selected.

In the view of the TAP, additional efforts are needed at jurisdictional level (outside the sphere of Makira and CAZ) to consult with local stakeholders on non-carbon benefits.

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.

Ind 35.1 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 [Approach for providing information on Priority Non-Carbon Benefits 16.2]	**Yes**

Yes, the ER Program proposes an approach utilizing methods available to collect and provide information on priority Non-Carbon Benefits. Two priority non-carbon benefits have been identified as a result of discussions with national stakeholders. The monitoring linked to tracking these criteria have been identified and will be added to the SIS. It is hoped that many of the other non-carbon benefits will also be captured in the SIS, which includes numerous indicators linked to social, governance, and environmental issues of import to stakeholders.

Once more detailed priorities have been identified; the TAP recommends the ER-PD team flag which of the SIS indicators can track these priorities most effectively.

Ind 35.2 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	**N.A**

Only applicable at the time of verification.

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

Ind 36.1 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: i. Reference to an existing legal and regulatory framework stipulating such authority; and/or 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. [Authorization of the ER Program 17.1]	**Yes**

Yes, the TAP recognizes in the Advanced Draft ER-PDthat one of the solutions proposed in the first TAP review that a Competent National Entity (the Ministry of Finance and Budget) represents together with the MEEF the country to entry into the ERPA has been proposed to assure proper ERPA signing arrangements.

Nonetheless, this should be clearly stipulated in the tables of both sections, 1.1 and 17.1. There is now a new reference on Section 1.1 – ER Program Entity that's is expected to sign the Emission Reduction Payment Agreement (ERPA) with the FCPF Carbon Fund (page 24) is the Ministry of Finance and Budget (MFB) and MEEF (jointly?) and in Section 17.1 ER Program Authorization – Page 270 to the MEEF – Ministry of Environment , Ecology and Forests as

the competent and legal authorized entity to sign/celebrate the ERPA with the Carbon Fund (based on article 1 of the Decree 2016-298 saying :

"The Government of the Republic of Madagascar will negotiate and sign the ERPA, represented by the MFB and the MEEF..."

The responsibility of MEEF flows from Decree No 2016-298 … which mandates MEEF to "reduce the process of degradation of natural resources" and to "provide for the rational and transparent valorization" (Article 1).ª The TAP however still expresses some concerns that this disposition still does not sufficiently address directly the competence to celebrate international agreements that implies the international transfer of national assets and involves financial international transactions.

Ind 36.2 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 [Transfer of Title to ERs 17.2]	**No**

As for now, the ER Program Entity does not demonstrate its ability to transfer to the Carbon Fund Title to ERs.

Even the ER Program Entity demonstrate that is possible to transfer the title to the Carbon Fund by respecting the land and resource tenure rights of the potential rights-holders (Public Forest Lands and Non Forest Lands) in the Accounting Area), there exist a limitation on a significant part of the ER Program Area as stated on Table 30: Ex Ante evaluation of the Emission reductions opportunities and potential in the MERPA – Section 13.1. EX-ANTE ESTIMATION OF THE EMISSION REDUCTIONS Pages 216/217, the two pre-existing of two Voluntary Carbon Standard Projects (Makira REDD+ Project - Managed by the Government of Madagascar and WSC; and Ankeniheny-Zahamena Corridor (CAZ) REDD Project - Managed by the Government of Madagascar and Conservation International).

The two pre-existing contractual agreements between the Government of Madagascar and the Commercial Representatives of the Government to act as "Exclusive Commercial Representatives" creates a limitation on the ability of the ER Program Entity to negotiate by itself the potential selling of a significant part (approximately 65% of the ERs of the ER Program Area) to the Carbon Fund)

Accord portant sur la Commercialisation de VCUs – Credits de Carbone – dans le corridor CAZ y compris la Gestion de Revenues issu de la vente de VCUs – MEEF and CI Conservation International

Article 2 Nomination du Représentant Désigné de L'Etat et du Représentant Commercial de 'Etat

- *L'Etat accepte, pour la durée du présent Accord, de ne pas commercialiser directement les VCUs du Projet*

This Contract also as implications /limitations on the Benefit Sharing Agreement and the distribution of Revenues of the selling of ERs (VCUs) – Article 3 – Obligation et Engagement de Conservation International:

Key of sharing of revenues :

50% to local populations
20% to the management entity (CI)
20% to the Country
5% to CI as commercial representative

2,5 % to cover costs linked to the program (validation … verification….etc)

2,5% to cover administration costs on the Government (BNC) REDD+ .

Also a significant part of the ERs already produced are included on a contractual agreement between the Government of Madagascar and the IBRD as Trustee of the Bio Carbon Fund stipulating contractual obligations that probably will be need to access on the potential ability to transfer the ERs to the Carbon Fund.

Taking this in consideration, the TAP cannot confirm the ability of the ER Program to transfer a significant part of the ERs to the Carbon Fund as they are dependent of two contractual agreements (CI and WCS) that created a set of rules establishing limitations to the ability of the ER Program entity transfer the ERs to the Carbon Fund. The TAP recommends that this issue needs to be studied urgently from a legal perspective.

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 comments under 36.2

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.

Ind 37.1 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 [Data management and Registry systems to avoid multiple claims to ERs 18.2]	**Yes**

Yes, the ER-Program will be linked (in future) to a comprehensive national REDD+ Data Management system.

As part of the Readiness process the country has decided to maintain its own national REDD+ Program and Projects Data Management System with BNC REDD+ managing such a national REDD+ registry in the future. They would include new projects and the existing two REDD+ projects of Makira and CAZ, active in the jurisdictional ER-Program area and both registered with the Verified Carbon Standard (VCS).

Preparatory work to establish a national data management and registry system in ongoing, including through a project of WRI implemented jointly with the Geomatics Laboratory to develop a national forest information system. It is expected that a national REDD+ Data Management System that will be operationalized until end of 2018.

This integrated information system provides information not only on REDD+ projects (defined as initiatives that generate carbon credits), but also on other REDD+ initiatives, sustainable natural resource management, and on institutional and legal arrangements. For REDD+ projects, it functions as a REDD+ Program and Projects Management System and ER Transaction Registry.

The TAP further would like to draw the attention to general issues relating to the transfer the Emissions Reductions under the ERPA (indicator 28.3 and 36.1 and 36.2 resource tenure regimes C 28.1; preventing double counting C23; and projects data management and registry system (37.1) that are all interrelated. They require a thorough understanding of the approach how Madagascar will address the underlying legal issues around the ownership of

carbon, the legal nature of ERs and the laws and systems established to deal with these matters under the specific ER-Program in the 5 Eastern provinces defined as jurisdictional area.

Ind 37.2 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: i. The entity that has Title to ERs produced; ii. Geographical boundaries of the ER Program or project; iii. Scope of REDD+ activities and Carbon Pools; and iv. The Reference Level used. 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&Is [Data management and Registry systems to avoid multiple claims to ERs 18.2]	**No**

No, such a data management system is yet not in place.

The ER Program intends to create a system that will provide the necessary attributes of ER Programs, nevertheless the ER-PD doesn't describe even an initial structure stating the necessary elements such as listed under sub-indicator 37.2 (i to iv) above.

The TAP noted that the ER-Program team has not prepared any further details on the data management system to be put in place and that only a preliminary list of requirements has been drawn (p. 274 of Advanced Draft ER-PD).

The TAP recalls that the future system will require to openly accessing the essential information from REDD+ projects, including a full description of the entity that has title to the ERs produced. The system should allow for the uploading of the shapefiles with the boundaries of the project, the definition of the scope of the project and, and the Reference Level used. Hence, the management system would need to provide the necessary information to deliver transparency.

The TAP recommends that the ER-PD team takes these observations into consideration when further reviewing the ER-PD.

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 18.2]	**No**

No, at this stage of TAP analysis, the information is not yet available.

The ER Program intends to have the overall information on the REDD+ activities publicly available. The planned system that will put in place at national level will rely on a web portal that would provide access to basic information in French. But until this moment the data and the data platform is not yet in place.

The Advanced Draft ER-PD has not further elaborated on the comments made by the TAP. There is still a need to describe on how Madagascar will deal with this important communication element.

Ind 37.4 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 [Data management and Registry systems to avoid multiple claims to ERs 18.2]	**Yes**

While administrative procedures are yet not defined for the operations of a national REDD+ Program and Projects Data management system, assurance has been given that these will be prepared before end of 2018, and once the ERPA is in place. Thus the TAP reviewed its assessment and rated this indicator with a Yes

The TAP notes that Madagascar is waiting the development of the Carbon Fund registry to take a decision on whether to maintain a national ER transaction registry by its own.

The TAP reiterates its recommendation to carefully addressing the creation of the national registry, as this implies needs for considerable financial resources for its creation and management, including costs for the technical installation, for securing the system, necessary licenses and backups, as well as costs for auditing. There might be a need to find a separate investment for such undertaking.

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

Ind 38.1 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 [Data management and Registry systems to avoid multiple claims to ERs 18.2]	**Yes**

Yes, the GoM is willing to develop its own national ER transaction registry which however will need expertise and adequate resources. An intermediate solution is propose in order to be able to launch the ER-Program in due time.

In reviewing the Draft ER-PD, the TAP noted that the REDD+ Program and Projects Data Management System include a national ER transaction registry and that it will be designed as a tracking database rather than a registry as such. Also, the TAP noted that Madagascar is waiting the development of the Carbon Fund registry to take a decision on whether to maintain a national ER transaction registry by its own.

Madagascar is currently exploring the possibility to use an existing and external registry service during the first years of the program, so that the development of a National Registry would not be a limitation for the implementation of the program and REDD+ in the next years, considering the urgency to reduce deforestation in Madagascar overall and in the jurisdictional area in particular.

Ind 38.2 The national or centralized ER transaction registry reports ERs for the Carbon Fund using the accounting methods and definitions described above in the MF [Data management and Registry systems to avoid multiple claims to ERs 18.2]	**Yes**

Yes, see also 38.1

Ind 38.3 An independent audit report certifying that the national or centralized ER transaction registry performs required functions is made public. [Data management and Registry systems to avoid multiple claims to ERs 18.2]	**N.A.**

Cannot be assessed at this stage.

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 18.2]	**No**

No, operational guidelines that clarifies the roles and responsibilities of entities involved in the national ER transaction registry have not been developed yet, although a general list has been provided in the draft ER-PD (page 274).

The specific details of the operationalization of the ER transaction registry are yet to be defined. The TAP draws the attention to the fact that the current draft on registry does not refer to the inclusion of management of the reversal buffer or the uncertainty buffer. It needs to be clarified how the serialization of ERs will be done to ensure tracking and how the reconciliation process with external registries will occur. As two major VCS projects are operating in the area, this issue should be carefully considered when preparing the registry.

The TAP recommends to further describing and clarity what will be done in the further preparation of the ER transaction registry and the preparation of operational guidelines.

ANNEX 1:

Methodological Note in respect to discussion on the inclusion of the VCS Projects in the ERPA

Land included in the jurisdictional area will be subject to 4 different accounting frameworks, namely:

- CF (WB): all land of the jurisdictional area
- VCS: only land also under the two project activities: CI, WCS
- REDD+: all land of the jurisdictional area together with all remaining land of the country
- NDC (PA): all land of the jurisdictional area together with all remaining land of the country

Because of the multiple presence of accounting mechanisms on the same land, same reduction units (ERs) generated from the land may be accounted multiple times. Such multiple accounting must be avoided by the project participants as follows.

Considering that the different methodological frameworks may result in accounting for a different amount of ERs from the same land and that the NDC will be the methodological framework under which the country performance under the UNFCCC will be counted, as well as its contribution accounted for, the maximum amount of ERs that can be accounted for from a land (AQ_{MAX}) should corresponds to the accountable quantity under the Paris Agreement (AQ_{NDC}), i.e.: $AQ_{MAX} = AQ_{NDC} = MAX(AQ_{CF}, AQ_{VCS}, AQ_{REDD+}, AQ_{NDC})$

Thus, to avoid any double accounting ER_{TOT} must be equal to AQ_{MAX} i.e. $ER_{TOT} = AQ_{MAX} = AQ_{NDC;}$ where $ER_{TOT} = ER_{CF} + ER_{VCS} + ER_{REDD+} + ER_{NDC}$. That means that the ERs accounted for under each of the 4 frameworks must not exceed AQ_{MAX}.

Setting the following time precedence in accounting for results in the jurisdictional area: I. CF, II. VCS, III. REDD+, IV. NDC; this means that for each land in the jurisdictional area:

A. The amount of ERs accounted under CF (ER_{CF}) should be equal to the accountable quantity (AQ_{CF})

$$\boldsymbol{ER_{CF} = AQ_{CF}}$$

B. The amount of ERs accounted under VCS (ER_{VCS}) should be equal to the accountable quantity (AQ_{VCS}) minus the quantity accounted under CF (ER_{CF}):

$$\boldsymbol{ER_{VCS} = AQ_{VCS} - ER_{CF}}$$

Note that RU_{VCS} may be equal to zero if $AQ_{VCS} \leq ER_{CF}$

C. The amount of ERs accounted under REDD+ (ER_{REDD+}) should be equal to the accountable quantity (AQ_{REDD+}) minus the quantity accounted under CF and VCS

$$\boldsymbol{ER_{REDD+} = AQ_{REDD+} - ER_{CF} - ER_{VCS}}$$

Note that ER_{VCS} may be equal to zero if $AQ_{REDD+} \leq (ER_{CF} + ER_{VCS})$

D. The amount of ERs accounted under NDC ($\boldsymbol{ER_{NDC}}$) should be equal to the accountable quantity ($\boldsymbol{AQ_{NDC}}$) minus the quantity accounted under CF, VCS and REDD+

$$\boldsymbol{ER_{NDC} = AQ_{NDC} - ER_{CF} - ER_{VCS} - ER_{REDD+}}$$

Note that ER_{NDC} may be negative if $AQ_{NDC} \leq (ER_{CF} + ER_{VCS} + ER_{REDD+})$.
This is a requirement to ensure that $ER_{TOT} = AQ_{MAX} = AQ_{NDC}$